



COMMISSION OF THE EUROPEAN COMMUNITIES

GUIDE TO THE APPROXIMATION OF EUROPEAN UNION ENVIRONMENTAL LEGISLATION

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PREFACE

by

Ritt Bjerregaard

Member of the European Commission

Ten associated countries in central and eastern Europe have declared their intention to seek membership of the European Union.

A condition for membership of the Union is that the candidate countries align their national legal systems with existing EU legislation in all areas, the so called *acquis communautaire*. This process of integrating EU law into national legal administrative systems is called the approximation process.

This short guide to the approximation of the environmental *acquis* summarises all existing EU environmental legislation and provides a practical road map to its implementation. It has been produced with the clear aim of helping politicians, civil servants and other decision makers involved in the approximation process in the associated countries in this important work.

The objective of the environmental approximation process is to ensure the complete alignment of national environmental legislation - and the corresponding administrative system - so that it complies 100% with the requirements of EU legislation. And not just on paper, but, of course, also in fact.

The first step in the approximation process is to make a complete and precise assessment of the legislative and administrative "gaps" which need to be filled in order to ensure compliance. The Guide gives advice on how to carry out such a legislative "gap-assessment" by using analytical tables of concordance.

But the Guide not only focuses on how to achieve formal compliance with the EU *environmental acquis*. It also contains a number of "implementation considerations" for each piece of legislation which authorities in the associated countries might find it helpful to take into account, when considering how to put the legislation into practice.

The Guide, which is now available in all the national languages of the associated countries in central and eastern Europe, is not meant to be a complete encyclopaedia, covering all possible questions related to approximation, but a practical road map pointing out the main roads and directions ahead.

We have tried to keep the Guide as short, practical and simple as possible. I hope that it will be widely circulated, read and used throughout the national administrations of our future new Member States in central and eastern Europe.

The road to full environmental approximation might seem to be a long and thorny one for most of the candidate countries. I am convinced, however, that the benefits for public health, for the environment - and for the economies of the candidate countries - will, by far, outweigh the efforts which have to be made in order to reach the goal. I hope that this little road map can help even the road and make the journey towards EU membership easier.

Ritt Bjerregaard

INTRODUCTION

European Union environmental legislation has developed over the last 30 years and comprises today some 300 legal acts, including directives, regulations, decisions and recommendations. To this comes a large number of communications and other policy documents of relevance for EU environmental policy

However, the body of EU environmental legislation, with which the associated countries in Central and Eastern eventually will have to align their national legislation and administrative practices, as a condition for membership of the European Union - the so-called *environmental acquis* - is considerably smaller. It mainly of about 70 directives - some of which, however, have been amended several times and supplemented with "daughter" directives - and 21 regulations. About half of these - 36 directives and 11 regulations - are related to products and were covered by the Commission's White Paper from 1995¹.

The White Paper aimed at facilitating the approximation efforts of the associated countries by structuring the bulk of EU legislation pertaining to the functioning of the Internal Market in a two groups: Stage One legislation which would cover the more basic EU legislation in each area, Stage Two which would cover the legislation based on or related to the first group.

¹ *White Paper on the Preparation of the Associated Countries of Central and Eastern Europe for Integration into the Internal Market of the Union*, COM(95) 163 final, 3.5.1995

In the White Paper, the Commission recognised the need for complementing the presentation of the environmental legislation with direct bearing on the Internal Market, covered by the White Paper, with a more comprehensive presentation, covering the whole of the *environmental acquis*.

This is what this Guide seeks to do. It is intended to help senior policy makers and officials in countries preparing for accession to the European Union deepen their understanding of the entire body of EU environmental legislation.

The Guide takes the approach of the White Paper step further with the aim to offer a kind of 'road map' to the approximation of environmental legislation, identifying the key issues and steps. This map represents the ground Central and Eastern European countries need to cover if they are to adopt fully the Union's environmental standards and rules.. As we are at the beginning of the road, the Guide looks at issues of transposition in somewhat greater detail than issues of implementation and enforcement, which will become more critical as the approximation process proceeds.

But as every traveller knows, a road map can only give an indication of the terrain to be covered, the distances involved, problems which may be encountered and milestones along the way. Much will be learned as the road is travelled that can only be guessed at the starting point. It is hoped that this brief overview and 'travellers' tips' will simplify preparation for the journey and the early stages of travel so that the ultimate journey can be accomplished with maximum efficiency.

Part 1 answers some of the most common questions about the general requirements in the process of approximation of environmental legislation. It contains two lists of steps to be taken: for the approximation of directives and for the implementation of regulations where actions are needed by the Member States.

Part 2 presents brief overview of the requirements of the EU environmental directives and regulations. It highlights the linkages between them and discusses key policy and administrative questions that need to be addressed in order to secure effective approximation.

The annexes contain: a brief description of the key elements of EU legislation and how to interpret them – for the many non-lawyers who will be responsible for preparing the new national laws and procedures; a list of the *environmental acquis* to date; and an example of the table of concordance which governments can use or adapt to monitor their progress in the transposition and approximation.

The Guide covers the EU environmental legislation adopted by 1 July 1997. Exceptionally, the Guide also describes some Commission proposals, which, if finally adopted by the European

Parliament and the Council, are likely to have a significant impact on the legislative framework in a certain area.

The Guide does not include legislation of environmental relevance and importance covered by other sectors of EU law and policy, such as agricultural policy. International conventions to which the Union is a party are only covered in so far as the Union has adopted EU legislation, directives or regulations, for their implementation. Communications and decisions concerning environmental action programmes and other policy documents are not included.

It should be borne in mind that the aim of the Guide is to present 'first principles' only and not a detailed examination of all finer points of interpretation of the individual pieces of legislation nor the general principles of EU law. For this it will be necessary to consult the legislative texts themselves and the interpretations given in the judgements of the European Court of Justice.

Please note that the advice given in the Guide is not legally binding and does not prejudice the position of the European Commission in any way.

Note to the second edition, January 1998:

This guide was first published in English as a Commission Staff Working Paper (SEC(97)1608) in August 1997. In this second edition, which has been translated into the national languages of the associated countries, some minor amendments have been made to the chapters on Waste Management and on Nuclear Safety and Radiation Protection. The legislation covered, however, remains the same as in the first edition, i.e. the legislation which was finally adopted by 1 July 1997.

For further information on environmental approximation:

The Commission newsletter "**Enlarging the Environment**" published by DG XI provides regular updates on new environmental legislation and policy. The newsletter is published bimonthly and is accessible on Internet: <http://europa.eu.int/en/comm/dg11/dg11home.html> – then select: "Enlargement newsletter".

Authorities in the associated countries in Central and Eastern Europe can get quick answers to questions concerning environmental approximation by calling **DG XI's Help Line**. The Help Line can be reached by telephone: +32-2 296 87 46, by fax: +32-2 299 41 23 or by e-mail: enlargement@dg11.cec.be.

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PART 1

INTRODUCTION TO THE APPROXIMATION OF ENVIRONMENTAL LEGISLATION

1. APPROXIMATION ISSUES

1.1 What is approximation?

The approximation of law is a unique obligation of membership in the European Union. It means that countries aspiring to join the European Union must align their national laws, rules and procedures in order to give effect to the entire body of EU law contained in the *acquis communautaire*².

As the obligation to approximate continues after accession, the pre-accession approximation process becomes an opportunity for countries to organise their institutions and procedures and to train their staff for the daily processes and responsibilities of European Union law making, implementation and enforcement.³

There are three key elements:

- First, to adopt or change national laws, rules, and procedures so that the requirements of the relevant EU law are fully incorporated into the national legal order. This process is known as **Transposition**. Although countries have considerable discretion in choosing the most appropriate national mechanism to reflect Union environmental obligations, this discretion is limited in some respects by general principles of Union law. In most cases it will be necessary to adopt national legislation passed by Parliament or in some countries by Presidential or Governmental Decree. Section 4 'Principles of Transposition' gives further guidance.

² The *acquis communautaire* includes the directives, regulations, and decisions adopted on the basis of the various Treaties which together make up the primary law of the European Union and Communities. It is the term used to describe all the principles, policies, laws and objectives that have been agreed by the European Union. It includes the Treaties, all Community legislation, all the principles of law and interpretations of the European Court of Justice, all international agreements signed by the European Commission as interpreted by the declarations and resolutions of the Council of Ministers. It goes much further than simply the formal legislation – acceding countries need to comply with the spirit as well as with the letter of EU legislation.

³ Agenda 2000 emphasises that as none of the candidate countries can be expected to comply fully with the *acquis* in the near future, "in partnership with the Union realistic national long-term strategies for gradual effective alignment should be drawn up and start being implemented in all the applicant countries before accession, in particular for tackling water and air pollution. These strategies should identify key priority areas and objectives to be fulfilled by the dates of accession as well as timetables for further full compliance; ensuing obligations should be incorporated in the accession treaties. All new investments should comply with the *acquis*." (Agenda 2000, Volume I, Communication: For a Stronger and Wider Union, DOC/97/6, 15.07.1997, p.65).

- Second, to provide the institutions and budgets necessary to carry out the laws and regulations (known as the '**Implementation**' or '**Practical Application**' of the directive).⁴
- Third, to provide the necessary controls and penalties to ensure that the law is being complied with fully and properly (**Enforcement**).

1.2 What is the scope of environmental approximation?

Following the principles laid down in Agenda 2000⁵, each applicant country will eventually have to adopt the entire *acquis communautaire* into its national legal order and to adapt its administrative system accordingly.

In broad terms, EU environmental legislation covers:

- **Products:** for example, control of noise from construction equipment, control of emissions from motor vehicles, control of hazardous chemicals in some consumer products, waste movements, control of hazardous chemicals and preparation in general, and trade in endangered species. Many of these requirements are covered in the White Paper.⁶
- **Activities or production processes** which can have environmental or health impacts: construction, operation of industrial plants, waste disposal, nature protection
- **Environmental quality** protection: for example controlling dangerous substances in air, water or soil, land development; nature and resource conservation; and biodiversity
- **Procedures and procedural rights** such as impact assessment, access to information and public consultation.

1.3 What is the deadline for approximation?

Subject to any prior negotiated agreements contained in the Act of Accession⁷, the national laws, regulations and administrative procedures which are needed to give effect to the existing body of EU law must be adopted by the date of accession. The legislation also may contain other deadlines for action by the Member States, such as the preparation of pollution control plans, the designation of protected or 'sensitive' areas, and compliance with emission limits or environmental quality standards.

⁴ See Annex 4 for full definitions.

⁵ See footnote 3 above.

⁶ See Preface.

⁷ Agenda 2000 foresees that the accession treaties with the applicant countries will contain such negotiated agreements on derogations linked to binding timetables for full compliance in certain areas. New investments, however, should as a rule comply with the *acquis* immediately. See footnote 3, above.

2. THE ROLE OF GOVERNMENTS IN APPROXIMATION

2.1 What is required by the EU legislation?

The vast majority of EU environment legislation is in the form of **Directives**, and these are the focus of this Guide. Different, and normally less complex actions are required for **Regulations** and **Decisions** because these do not need incorporation into national law.

The **first step in the process of approximation** is the analysis and comparison of EU and existing national environmental legislation to determine the existing state of conformity and the appropriate national response to the EU legislation.⁸

This initial evaluation has two steps:

- Step 1. Is there national legislation covering this subject matter?
- Step 2. Where there is national legislation, each article of the EU law must be compared to the relevant national law(s) and regulations.

The national legislation may:

- **respond entirely** to EU obligations in which case the evaluation is more a check of conformity⁹;
- **correspond in part** to EU obligations, in which case the evaluation will need to consider gaps which may remain and the possible ways of dealing with them;
- **appear to be in conflict** with EU legislation, in which case the evaluation should include a review of options for the modification of relevant national legislation (whether to adapt existing laws or to replace them, for example); here again all parts of the relevant national law need to be considered.

When beginning the process of approximation, Member States often compare their national laws, institutions and procedures with the requirements of a directive in tabular form, with each article or requirement of the national legislation set out in comparison to the reference of the relevant article of the directive. This can later be used as a guide to the texts the Member States must provide to the Commission demonstrating that they have approximated the EU directive in full. An example of such a **table of concordance** is given in Annex 4. A similar implementation table might be prepared containing the most important steps to approximation described below and summarised on pages 12-13 – these can be checked off when they have been accomplished.

National administrative instructions, circulars, and some types of ministerial order or decree which correspond to EU environmental legislation but which are not binding pose a particular

⁸ Attention should be drawn to the assistance which the associated countries can get from the TAIEX office for the development and implementation of approximation programmes for the *acquis* covered by the White Paper and from the DISAE facility for the rest of the environmental *acquis*.

⁹ It must be stressed that only the European Commission may undertake the formal compliance review.

problem. They are not normally considered sufficient for transposition, and must be converted into more formal legal measures.

For example, one Member State had incorporated the directive 80/778/EEC on the quality of drinking water into its law by means of an administrative circular. The Court of Justice said that it must adopt legislation which transposed the directive's maximum admissible concentration limits for pollutants into national law.

2.2 Choice and Content of National Measures

The Ministry with primary responsibility for environmental approximation must consider the individual EU laws to determine the extent of discretion they have concerning the scope, form, level and definition of requirements under their national laws and rules.

While EU environmental directives are designed to be implemented in ways which are adjusted to the unique circumstances of each Member State, the ultimate responsibility is on the national government to take binding measures which fully carry out the letter and the spirit of EU environmental law. Where the directive is precise, countries must transpose the precise requirement, for example, as in the definitions used in the directive, minimum quality standards, and permitting requirements. Where the directive allows scope for different national actions, as in the details of the permitting procedures or public consultations, or in the designation of geographical areas to be covered by the directive, then Member States have greater freedom.

Countries have a choice between new laws and administrative measures or the amendment of existing laws and measures. It may decide that a single law should be introduced or modified, or that a series of laws need to be adopted or modified to give effect to a particular directive. One country may also decide to implement several directives through one national law.

These laws may need the involvement of different levels of government and different institutions. The competent Ministry may act alone or in agreement with other involved ministries and institutions such as State Inspectorates and laboratories.

To the greatest possible extent, national legal measures aimed at approximating EU legislation should be integrated with national environmental priorities and principles in a manner which fully reinforces the principles, objectives and requirements of EU law. It may be helpful to look at existing Member State legislation for examples of different types of solutions to approximation issues. However, each Member State takes the actions which it considers appropriate and feasible in its own unique legal, economic and political circumstances.

For example, in Belgium, which is a federal union where powers to regulate the environment are devolved almost entirely to the regional governments, each region implements EU law separately. In France, the transposed EU directives are contained in the Environment Code, which aims at harmonising existing environmental legislation by assembling it in one legislative framework.

The choice of measures may also be governed by the form of the requirement or type of EU legislation. EU regulations, for example apply directly in Member States and may not be transposed into national law. When a directive prohibits an action (the use or the discharge of certain substances such as asbestos or heavy metals in products), it provides fixed

requirements. But when a directive fixes limit values (82/884/EEC on limit value for lead in the air) which are precise targets to reach, but leaves the Member States free to decide how to comply, the requirement becomes more flexible.

2.3 The competent authority or authorities

At least one authority at national level must assume overall responsibility for the implementation of the EU law and be the European Union's interlocutor. A national 'competent authority' is also required in federal states even where the bulk of the legislation is adopted and implemented at the level of the regional government. The competent authorities, especially where they have licensing or enforcement powers under environmental directives, should normally be public bodies or agencies of some sort.

Competencies may be divided among several institutions at the same level or at different levels. For example, a Ministry of Public Works may have responsibilities in the implementation of the directive on environmental impact assessment. Local, regional and national authorities may all have competence for issuing environmental permits controlling emissions to air, water or land. Monitoring and enforcement may be partially or wholly delegated to regional or local authorities.

2.4 Institutions, administration and financing

The practical application of the new legislation means that changes may have to be made to institutions, procedures and standards. The responsible ministries and authorities should consider these institutional needs, the financing of administration and enforcement, and investments. Transitional provisions are normally used to bring existing industrial plants or activities gradually within the scope of the new regulatory system, such as the requirements for the provision of waste water treatment which are phased in to 2005.

The costs and benefits of different implementation choices have to be considered. An evaluation of the financing needed for administration and for investment, in order to improve environmental quality should be carried out, and methods need to be identified whereby which the needed financing can be obtained.

2.5 Enforcement

Enforcement is a growing focus of attention in the European Union, both because of the problems of uneven implementation by the Member States and the recognition that compliance problems can arise even in countries which have relatively strict laws and procedures.

Therefore, associated countries should take all necessary measures to improve their monitoring and control mechanisms, for example, by strengthening their inspection systems and by taking administrative and judicial measures, in order to ensure that their environmental legislation is properly implemented and eventually enforced.

2.6 Consulting interested groups and individuals

The responsible Ministry will probably find it useful to consult with interested groups during the process of transposition as well as implementation, both to identify and avoid potential problems as well as to gain support from the groups which are involved in or subject to the national laws

and procedures. Possibilities include government departments, local and regional authorities, industry, non-governmental organisations and neighbourhood groups.

2.7 Steps to approximating EU legislation

Many of the steps which Member States routinely follow in the process of approximation are the same for all directives and regulations. These are listed on the following pages, together with some of the more specific issues that need to be decided in the process of aligning national legislation with that of the European Union.

Steps to the Approximation of EU Directives

Step 1. Determine the type of law and its requirements

1. What type: directive, regulation, decision?
2. What are its aims and objectives?
3. What competent authorities are needed?
4. What information must be collected and provided to the Commission?
5. What planning is required?
6. What scientific or technical knowledge is required?
7. What consultation procedures are required?
8. What investments are required?

Step 2. Determine your national choices

1. Which requirements (in the EU legislation) allow choices to be made?
2. Which requirements do not allow choice?
3. National Laws or administrative measures?
4. New or amended legislation?
5. Content of national legal measures?
6. What are the costs and benefits to the economy and to the environment?
7. Which sectors will bear the burden?
8. How should the transition to the new requirements be organised: deadlines, transition periods, implementation programmes, investments & reports

Step 3. Determine how the national law will be implemented and enforced

1. Central, regional or local level implementation? Staff and technical needs?
2. What powers will officials need to have?
3. What co-ordination and consultation amongst regulatory bodies is needed?
4. What is the need for Information, Guidelines, Training?
5. Costs and benefits of different implementation choices?
6. What financing is needed for administration? for investment?
7. How will costs be recovered and financing be obtained?
8. What monitoring is needed?
9. Who will carry out the monitoring? Do they need training, staff, equipment?
10. What penalties should apply? How will they be applied (administrative, judicial)?

Step 4. Decide information and consultation procedures

1. Who should be consulted? Government departments, Local and regional authorities, Industry, NGOs, neighbourhood groups?
2. What form of consultation is needed?
3. At what stage in the process?
4. Other possible roles of organisations outside the national government?

Step 5. Define the Implementation Programme

1. Legislative schedule
2. Preparation of implementing administrative rules, decrees, etc.
3. Budgetary schedule
4. Institutions, staff and resources
5. Training, information materials, meetings with concerned government offices, industry, public, etc. and communication activities
6. Investments
7. Operational expenses
8. Monitoring
9. Information assembly and reporting
10. Enforcement

3. APPROXIMATION AND THE FORMS OF EUROPEAN UNION ENVIRONMENTAL LAW¹⁰

3.1 The role of the European Community Treaty in the approximation process

The EC Treaty establishes some general principles of environmental policy in Article 130r but these do not have to be expressly transposed into national laws for the purposes of approximation. They help in understanding the goals of EU environmental policy and laws, as well as in interpreting and approximating individual EU legal acts.

EU environmental law has to be expressly based on one or more provisions of the Treaty, the most common in the environmental field being Art 100a (Single Market related legislation with environmental dimensions) and Art 130S (purely environmental). For the purposes of approximation, the significance of the legal base of the EU law in question is first of all that it will affect the ability of a country to impose stricter environmental standards than those contained in the EU law in question.

For example, if a directive is adopted on the basis of Article 130S, Member States have more opportunity to adopt stronger national measures than if it is adopted on the basis of Article 100a.

3.2 Directives

Most EU environmental laws are directives. This is a form of law peculiar to the European Union. They are designed to impose obligations on Member States and to be sufficiently flexible to take into account differing legal and administrative traditions. The choice and method of aligning the national legal and administrative system is left to the discretion of the Member State. (See Section 4 below.)

Directives are binding on all Member States but may contain differing requirements which take into account the different environmental and economic conditions in each Member State.

¹⁰ European Union or European Community? References to both the European Union and the European Community will be found in policy and legislative documents. Both entities exist. The Maastricht Treaty created the European Union to express the wider political aspirations of the Member States. The European Union encompasses both the European Community (whose powers and institutional arrangements are laid down in the European Community Treaty) together with broader mechanisms for policy development and co-ordination among Member States, described in the Maastricht Treaty.

The legal basis for environment legislation is in the EC Treaty and the European Community is the legal entity which ratifies international conventions. In many instances, the same bodies (Member States, European Commission etc.) will be acting both within the Union and the Community. The key distinction is that only within the European Community may legislation be passed which binds Member States. Thus, strictly speaking, the reference should be to European Community legislation, not European Union legislation. However, for the sake of simplicity, this Guide uses the term European Union to encompass both policy and law.

For example, the Large Combustion Plants Directive sets different targets for the reduction of emissions from each Member State, and even allows some which are economically less developed to increase their emissions.

Framework directives set out general principles, procedures, and requirements for legislation in different sectors. So far they have been adopted for the air and waste sectors, and a proposal has been made for the water sector. Other 'daughter' directives in each sector must conform to the general requirements of the framework directive.

Understanding the structure of EU legal texts is vital in developing effective approximation strategies. General guidance on this subject is given in Annex 1.

3.3 Regulations

About 10% of EU environmental laws take the form of regulations. Regulations are directly binding in Member States and supersede any conflicting national laws. Member states may not transpose the provisions of regulations into national law, even if the national law is identical to the regulation.¹¹

Regulations therefore largely fall outside the approximation process and come into force in the acceding countries on the date of accession.. Nevertheless, environmental regulations require further national measures for implementation and therefore cannot be wholly ignored before accession.

For example, the types of measures which countries will have to take include the appointment of competent authorities to inspect and control trade in severely restricted chemicals or in endangered species, the publication of guides and notification forms, or the designation of national sanctions for violations of the law.

¹¹ This ban on transposition arises from the fact that regulations must be applied directly by national courts and national administrative bodies; any transposing national legislation would be in conflict with the particular legal nature of regulations under the EC Treaty.

Table 1. Three forms of binding EU Legislation

Directives	Regulations	Decisions
<p>1. Enter into force upon the date specified in the directive or on the 20th day after publication in the Official Journal: this obliges Member States to approximate</p>	<p>1. Enter into force upon the date specified in the directive or on the 20th day after publication in the Official Journal</p>	<p>1. Enter into force upon notification to the party to whom they are addressed.</p>
<p>2. are the most frequently used of EU environmental law</p>	<p>2. are used when a unified system is needed: Funds, institutions; EU voluntary schemes such as eco-label; product or trade regulation (endangered species, transport of wastes)</p>	<p>2. are used to specify detailed administrative requirements or update technical aspects of Regulations or Directives</p>
<p>3. Member States must adopt laws, regulations and procedures to give effect to the directive by the date of transposition; this is typically two years after the date of entry into force.</p>	<p>3. Member States must establish institutions and procedures; they should repeal conflicting national provisions</p>	<p>3. focused in scope and application</p>
<p>4. come into effect on the date of practical application, the same as the date of transposition unless other date(s) is(are) indicated in the directive itself for specific actions. Some directives can have direct effect if the Member State fail to transpose into national legislation.</p>	<p>4. are directly binding on the date they come into force</p>	<p>4. are binding on the parties to whom they are addressed on the date they come into force</p>

Regulations usually have a precise purpose, and are used where it is important that in the Member States precisely the same requirements are applied. In some sectors¹² such as waste and chemicals, EU law is a mixture of regulations and directives. It is important to analyse the impact of the regulations in order to know what actions will be necessary to approximate the linked directives.

3.4 Decisions

Decisions are individual legislative acts which are binding in their entirety upon the parties to whom they are addressed. They differ from regulations or directives in that they are usually very specific in nature. They are less common in the environmental field. Environmental regulations or directives often given the Commission the power to take decisions to implement them.

For example, the Commission can amend the lists of wastes under the regulation on the transfrontier shipment of waste, specify forms and documentation requirements, and other administrative matters. The Commission has taken a series of decisions setting conditions for the award of the EU eco-label to different product groups.

3.5 The role of the European Court of Justice

The European Court of Justice has the ultimate authority for the legal interpretation of the Treaty and EU legislation. In the last ten years the Court has made an increasing number of decisions concerning the interpretation of EU environmental laws and their approximation by Member States in the context of the establishment of the Single Market. It has also developed important principles concerning the transposition of directives.

Therefore, when drawing up a detailed environmental approximation strategy, countries should carefully consider the impact of these decisions on the interpretation of the directives and the methods of approximation.

¹² For example, the regulation implementing the Basle Convention on the transfrontier shipment of waste and the Waste Framework Directive; the directives on the classification and labelling of hazardous chemicals and preparations and the regulation on the export and import of banned or severely restricted chemicals.

4. TRANSPOSITION PRINCIPLES

This section gives some general guidelines and answers some common questions about the process of approximating EU environmental legislation. There are a number of crucial principles and requirements which should guide the process of approximation and implementation which derive mainly from the case law of the European Court concerning the failure of a Member State to properly implement a directive. The judgements of the European Court are legally binding, even though they do not appear expressly in the Treaty or in the directives themselves.

A more specific discussion of each directive or regulation is in Part 2 of this Guide.

4.1 Can a government use non-binding administrative measures to achieve the aims of the directive?

No. Although the Treaty appears to give wide discretion as the means of transposition adopted, the Court of Justice has held that reliance on non-legal methods of transposition conflicts with the binding legal nature of directives. This principle is especially important for those countries who have traditionally relied upon administrative measures in carrying out environmental policy.

Where a provision of a directive provides for the setting up of general programmes or for the achievement of general targets, legally binding Environmental Agreements between public authorities and industry can be an appropriate means of implementation. (Cf. Commission Communication on Environmental Agreements, COM(96) 591 of 27.11.1996 and Commission Recommendation 96/733/EC, OJ L 333/59 of 21.12.1996).

Provisions which oblige Member States to gather information and produce reports, do not necessarily have to be transposed into binding national legislation in Member States.

4.2 Does new national legislation have to be adopted?

Not necessarily. Countries may use existing national laws or amendments to existing laws to implement the directive. But it is rare that an existing law is a perfect match and experience has shown that it is unwise to rely on existing legislation unless their adequacy has been demonstrated on the basis of a detailed provision by provision comparison of national law with the EU directive.

For example, In 1985, France informed the Commission that its 1977 law on environmental impact assessment satisfied all the requirements of Directive 85/337/EEC, but later had to modify the law in order to come into compliance.

4.3 Do the precise terms of the directive have to be transposed in national legislation?

No. Directives are designed to give some flexibility to Member States, and word for word transposition is not essential if the requirements of the directive are complied with by national laws. But, countries need to be very careful that the language of national law fully reflects the

directive. Some Member States have in fact adopted a practice of word for word transposition (known as 'copy-out') in order to avoid problems of non-conformity. This practice has its dangers: transposition without accompanying legal and administrative measures to ensure effective implementation and enforcement of the directive will not be sufficient. It is at times necessary, in order to achieve in practice the result required by the directive, to make transposing legislation more detailed than broadly phrased obligations in the directive. In doing so great care must be taken not to restrict the scope of the obligations contained in the directive.

It is particularly important to ensure that the definitions in the EU directive are literally and fully transposed in the national legislation intended to implement the directive.

4.4 May government choose the sanctions to enforce national laws transposing directives?

Yes. Directives generally leave the form of sanction to the discretion of Member States. Only rarely do they even prescribe that breach of national law implementing a directive must be punished by civil or criminal penalties. But this discretion is not completely free:

- The form of national sanction chosen must be effective to ensure that the aims of the directive are achieved.
- There must be no discrimination between the sanctions adopted for measures implementing directives and sanctions laid down under related national legislation – for example, an environmental offence under national law should not have unduly severe sanctions compared to an offence under a national law which transposes a comparable requirement under an EU directive.

For example, a penalty for violation of emission limits on discharges to water should be comparable, whether or not those discharge limits are covered by an EU directive.

4.5 May countries adopt higher national environmental standards?

Sometimes. The EC Treaty allows countries to adopt – or to maintain – national environmental standards and requirements which are more stringent than those contained in EU environmental legislation. But this freedom is not absolute.

Some EU environmental directives explicitly allow – or encourage – the Member States to take more stringent measures. That is, they set the minimum standard for compliance, not the maximum standard. This is frequently the case for emission limit values on discharges to air or water, or for environmental quality standards.

For example, EU directives on air and water quality often set mandatory Limit values for certain pollutants, supplemented with Guide Values which set environmental quality objectives the Member States should strive to achieve.

Where EU environmental directives are based on Art. 100a of the EC Treaty (single market), a Member State may, if it has obtained advance approval from the Commission and demonstrated why it needs the more stringent environmental measure, apply more stringent environmental protection measures.

Where EU environmental legislation is based on the environmental provisions of the Treaty (Art.s 130r, s & t), countries have broader rights to adopt more stringent measures. These measures must be notified to the Commission (but not in advance) and they may not be a disguised form of trade restriction or arbitrarily discriminate against the goods or services of another Member State. Where an EU directive or regulation, based on Article 130s, aims to fully regulate an area of activity, such as the regulation on transfrontier shipment of waste, countries should be very cautious in introducing more stringent measures.

4.6 Does a government have complete discretion to designate geographical areas under environmental directives?

No. Many of the environmental directives call for the Member States to designate areas within their territory according to criteria given in the directive which will be subject to the directive's requirements. Examples include: habitat protection areas, sensitive and less sensitive areas under the Urban Wastewater Treatment Directive, and areas where the air quality does not meet EU standards. Usually these areas must be notified to the European Commission and plans for their protection or remediation must be adopted.

Although the criteria given in the directive may leave some discretion to Member States in how they go about the task of designating such areas, failure to correctly apply the criteria, e.g. by introducing illegitimate economic considerations in the designation procedure, can get the Member State government into trouble with the European Commission and ultimately with the European Court of Justice.

The following general principles apply:

- The designation must be carried out by the competent national authority in an appropriately legally binding form, whether or not the proposal is developed by other institutions.
- The criteria for designation specified in the directive must be carefully applied.
- Governments must be particularly wary of allowing extraneous factors to influence the choice of designated areas. Because of the costs for protection or environmental improvement which may follow from the designation, there will be pressure to designate as few and as small areas as possible. But economic and other non-environmental considerations may not be taken into account, unless they are specifically allowed by the directive.

It will be valuable to review the practices of the Member States which are in compliance and to check the rulings of the Court of Justice.

For example, under Directive 85/203/EEC Member States may fix limit values lower than those in the directive in zones where they consider it necessary to limit or prevent a foreseeable increase in pollution by nitrogen dioxide in the wake of urban or industrial development.

4.7 Does approximation apply to regulations?

Strictly speaking, no, but countries must still take some administrative steps to implement regulations. The environmental sector has some very important regulations, which, for example, implement controls on international trade in waste and on endangered species, and the Eco-management and Audit Scheme. These will not come into force in the acceding countries until the date of accession, and no transposition into national law is required – or indeed permitted.

But countries should be aware that:

- Some regulations require the designation or establishment of authorities or bodies responsible for their implementation; this may be done by administrative order or decree.
- Some expressly require countries to specify penalties in national law – the civil or criminal code, for example – for non-compliance with the EU regulation. Even if there is no such express provision there must be effective national sanctions to ensure compliance with the regulations.

So countries should ensure that the necessary administrative and institutional measures are in place by the date of accession and that any overlapping or conflicting national laws are repealed.

Where the EU legislation in an environmental sector contains a mixture of directives and regulations, countries must take particular care to ensure that the national measures implementing the directives are fully integrated and do not conflict with the EU regulations.

There are fewer steps to implementing regulations than to directives. These are set out on the following page:

Steps to Implementing Regulations

1. Identify a national competent authority or authorities to implement the regulation
2. Identify what legislation (if any) is necessary (e.g. to prescribe sanctions or designate competent authorities).
3. Establish a legislative timetable (as appropriate).
4. Prepare administrative instructions and procedures to the relevant authorities
5. Consult with other concerned government departments and with the groups affected by the regulation (e.g. importers and exporters; major industries; environmental organisations)
6. Provide staff and resources
7. Train staff
8. Inform affected industrial sectors and companies of what is required
9. Provide the relevant documents, forms and certification to the groups concerned
10. After accession, monitor implementation and report to other Member States and to the European Commission as needed.

PART 2

OVERVIEW OF EU ENVIRONMENTAL LEGISLATION

INTRODUCTION

Part 2 includes brief summaries of the directives and regulations in each sector, diagrams showing the relationship between the legislation in each sector, and some actions which need to be taken to fully and effectively implement them beyond the general steps set out in Part 1, pages 11-12 and page 22.

Some proposals for directives which are currently in the legislation process also have been included because they will be very important elements in the future structure of EU environmental law.

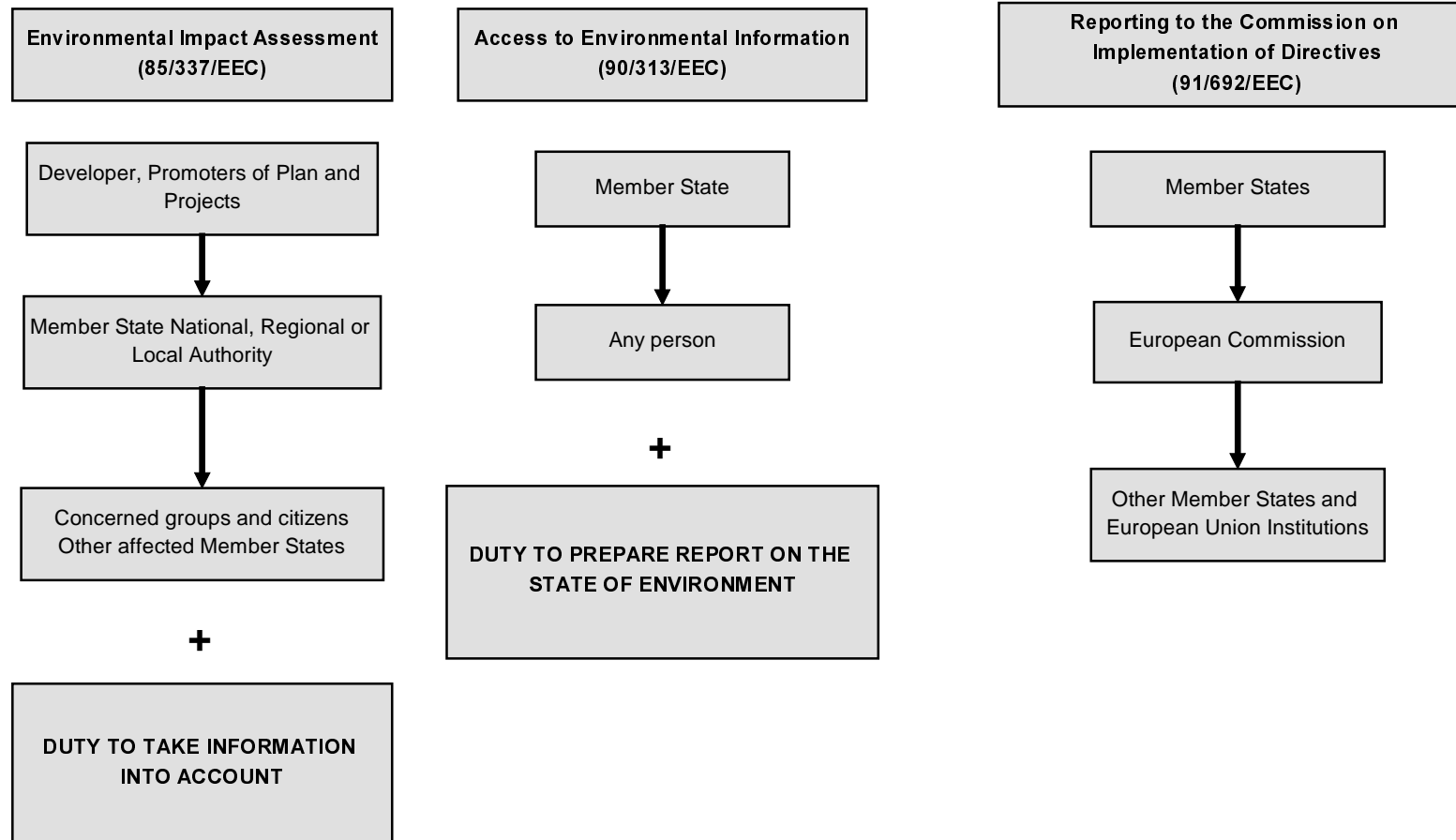
A. HORIZONTAL LEGISLATION

Legislation may be classified as 'horizontal' when it relates to general environmental management issues rather than to specific sectors, products or types of emissions. The three directives in this category concern the collection and assessment of information on the environment and on the wide range of human activities which impact the environment. The information may be in the form of an environmental impact assessment of proposed developments, public access to information about the environment, or the requirements and procedures for reporting on the implementation of environmental directives.

Accurate information about the environment and the effects of human activities is of the utmost importance since it is the basis for the development, implementation, monitoring and enforcement of environmental protection regulations and policies. It is also the basis for public participation in environmental decision making and hence for stronger democratic institutions.

The Directive on **Access to Environmental Information** seeks to grant the public access to information on the environment which is held by public authorities or government controlled bodies with public responsibility for the environment. It is based on a broad definition of environmental 'information' which must be made available to individuals without justification. It calls for periodic 'state of the environment' reports by Member States.

HORIZONTAL LEGISLATION DUTY TO INFORM



Prior to the passage of this directive few Member States had regimes which were specifically designed to address environmental information though a number did have legislation relating to administrative information. Some states had no specific legislation on access to administrative information.

The **Environmental Impact Assessment** Directive requires that, before governmental approval can be granted, certain development projects must be subject to a process in which potential environmental effects are assessed.

The Directive Concerning **Reporting on Implementation of Environmental Directives** harmonises and seeks to improve upon the Member States' reporting to the Commission.

A.1 Environmental Impact Assessment

Directive 85/337/EEC on the assessment of the effect of certain public and private projects on the environment has recently been amended by Directive 97/11/EC whose provisions must be transposed and put into force by 14 March, 1999. The changes are less an amendment and more a transformation which aim to overcome the weaknesses of the original, especially concerning the types of project to be assessed and the information to be included in the assessments. The directive embodies the preventive approach to environmental protection by requiring that before consent is given by a governmental body, development projects likely to have significant effects on the environment, are subjected to an assessment of possible environmental impacts.

Some categories of projects listed in Annex I to the directive are always subject to the environmental impact assessment requirement. Others, listed in Annex II, which may have significant effects on the environment are subject to assessment when certain criteria determined by the Member State are met.

The promoter must supply the competent authority with detailed relevant information about the project in the impact statement. Environmental authorities must be given an opportunity to comment before a decision on the project is taken. The public must be informed of the request for development and the impact statement and allowed to express its opinion. Decisions by the competent authority have to take the assessment results into account.

Information must be provided to other Member States likely to be affected by a project, and these may participate in the assessment procedure. This follows the main provisions of the United Nations Economic Commission for Europe Convention on the assessment of projects with transboundary impacts (Espoo Convention).

Implementation considerations

1. Determine the competent authorities and the administrative structure that are needed at the national and sub-national levels. Existing Member States have relied heavily on the integration of EIA requirements into land use planning legislation with much responsibility for implementation given to local governments. The EIA procedure might also be integrated into the IPPC for installations and activities covered by that directive.
2. Guidelines must be established at the national level on information to be included in an environmental impact document and for the assessment and decision-making processes.

This will support the standardisation of procedures and outcomes. They should be specific to particular types of activity, e.g. roads, railways, airports, urban development.

3. A key dimension of the guidelines is the development of procedures for public participation models in order to arrive at transparent decision-making processes.
4. It will be important to provide training in conducting the assessment processes, measuring, mitigating or preventing the environmental effects of projects.
5. Reasonable fees can be charged the promoters for the administrative costs of processing the environmental impact assessments.
6. Avoid conflicts of interest in which administrative 'competent authorities' are asked to approve projects for which they are also promoters.
7. The competent authority will need to have the necessary technical and scientific knowledge in order to assess the environmental impacts of the project based on the information gathered and provided by the developer.

EIA Directive – Implementation considerations

National Legislative Framework

- Compare Directive requirements to existing national laws
- Identify Legislative Gaps
- Options:
 - One main legislative tool (EIA Act)
 - Integration into a Land Use Planning Act
 - Amendments to existing legislation (e.g. Environment Framework Act)

Competent Authorities (CAs)

- Determine CAs
- National level CA must report to Commission on implementation, ensure consistency of EIA processes, public consultation, appeals procedures
- Local level CAs may be established to implement projects with narrower impacts

Legal Checkpoints

- Pay attention to definitions for ‘project’,
- Ensure that multiple small projects (‘pipeline’) which are exempt from EIA do not add up to one large project which is subject to EIA. In this case EIA should be required for all.
- Treat exemptions from the Directive narrowly.

The EIA Procedure

- Develop national guideline for EIA procedure and for common EIA project classes.
- Develop national guideline for EIA documents.
- Establish strict time limits to avoid financial and administrative problems of delay.
- Consider need to integrate EIA and land use procedures.

Stakeholders

- Ensure that, all parties including local government, affected government departments, industry representatives, land developers and the public are given the opportunity to comment on draft EIA laws and administrative regulations.
- Ensure public participation in EIA processes and decisions, and appeals procedures.

Financial Considerations

- Project promoters to pay administrative costs of individual EIA processes, documents and experts.
- Public to pay experts testimony and commentary; reasonable copying costs under some circumstances.

A.2 Access to Information

Directive 90/313/EEC on the freedom of access to information on the environment imposes a duty to ensure that information which is normally held by publicly accountable bodies is available to the public on request. Answers have to be provided within a specified time and there is a right of appeal where information is denied. Member States also must make periodic state of the environment reports.

Implementation considerations

1. The key to successful implementation of this directive is in striking a balance between confidentiality and access to environmental information, but the presumption should be in favour of unrestricted access.
2. This directive is often seen as a critical tool to guarantee transparency of government decision-making and to ensure government accountability. Governments should develop clear procedures for the provision of information to the public.
3. A guide on access to information should be published to ensure the public understands and benefits from it. One means of implementation is through a system of public registers which identify decisions or documents related to the environment to which the public has access.
4. Affected institutions and persons should be informed about their obligations. This training should include awareness raising and capacity building in authorities that are likely to receive the public's requests for information.
5. In order to prepare and publish periodic reports on the state of the environment, a system should be set up to regularly collect, analyse and process the necessary environmental data.
6. Where monitoring of compliance are carried out by different authorities or bodies, it will be necessary to set in place harmonised internal information systems in order to ensure that the relevant data in a comparable format are available to national authority responsible for reporting to the Commission.

A.3 Reporting on Implementation of Environmental Directives

Directive 91/692/EEC standardising and rationalising reports on the implementation of certain Directives relating to the environment aims to rationalise, on a sectoral basis, the requirements for Member States to transmit to the Commission the information required under certain environmental protection directives. Reports are to be transmitted every three years and each sector has its three-year cycle. An exception is made for Directive 76/180/EEC, bathing waters, for which an annual report continues to be required. This directive, which has been integrated into different other directives, must be implemented by Member States, but does not have to be transposed into national legislation in Member States.

Implementation considerations

1. Review environmental monitoring and information systems to ensure that the required information is generated in an appropriate form for evaluation and transmittal to the European Commission.

2. Where monitoring of compliance is carried out by different bodies, establish harmonised information system to ensure that the relevant data are available in a comparable format to the national authority responsible for reporting to the Commission.
3. Assign responsibility for the preparation of the report and provide planning and reporting timetables.

A.4 European Environment Agency

Regulation EEC/1210/90 established the European Environment Agency (EEA) whose purpose is to provide the European Union and the Member States with information on environment at European level. The regulation is currently under revision, see proposal for an amending regulation in COM(97) 282 final of 13.06. 1997.

Implementation considerations

1. Regulations cannot be transposed into national law.
2. The EEA and the Member States co-operate in environmental monitoring and assessment programmes, as well as in the preparation of reports on the state of the environment. Appropriate monitoring practices will have to be put into place. Institutions will have to be authorised and equipped to participate in EEA activities. This can be launched in advance of accession, as the EEA is already building its programme of co-operation with third countries.

A.5 LIFE

Regulation EEC/1973/92 established the financial instrument for the environment known as LIFE for actions which support the "polluter pays" and subsidiarity principles of Community policy. LIFE only funds a proportion of the cost of a project.

Implementation considerations

1. Regulations cannot be transposed into national law. LIFE is a grant programme managed by the European Commission.

B. AIR QUALITY

Air pollutants come from a wide variety of sources, both mobile and stationary. This Section deals the legislation concerning general **air quality assessment and management** and the legislation on controls of **emissions from mobile sources**, i.e. transport related emissions from motor vehicles and fuels.

Legislation on controls of emissions from **stationary sources** are dealt with in *Section F*, concerning emissions from industrial installations and power generation, and in *Section C*, concerning emissions from waste incinerators.

The new Air Quality Framework Directive is designed to provide a comprehensive strategy for the management of air quality in Member States linking controls on emissions with the attainment of air quality objectives. This Directive will progressively take effects when its forthcoming daughter directives are adopted and enter into force. These forthcoming daughter-directives will replace three existing directives which establish quality standards for sulphur dioxide and particulates, lead, and nitrogen oxide. Under the Tropospheric Ozone Pollution Directive Member States also have to set up **ozone monitoring** networks.

A series of directives control emissions from **motor vehicles and fuels** through technical requirements on the vehicles and through limits on the presence of substances such as lead and sulphur in fuels. Additionally a Directive on emissions from engines to be installed in mobile machinery is due to be adopted soon.

B.1 Air Quality Framework Directive

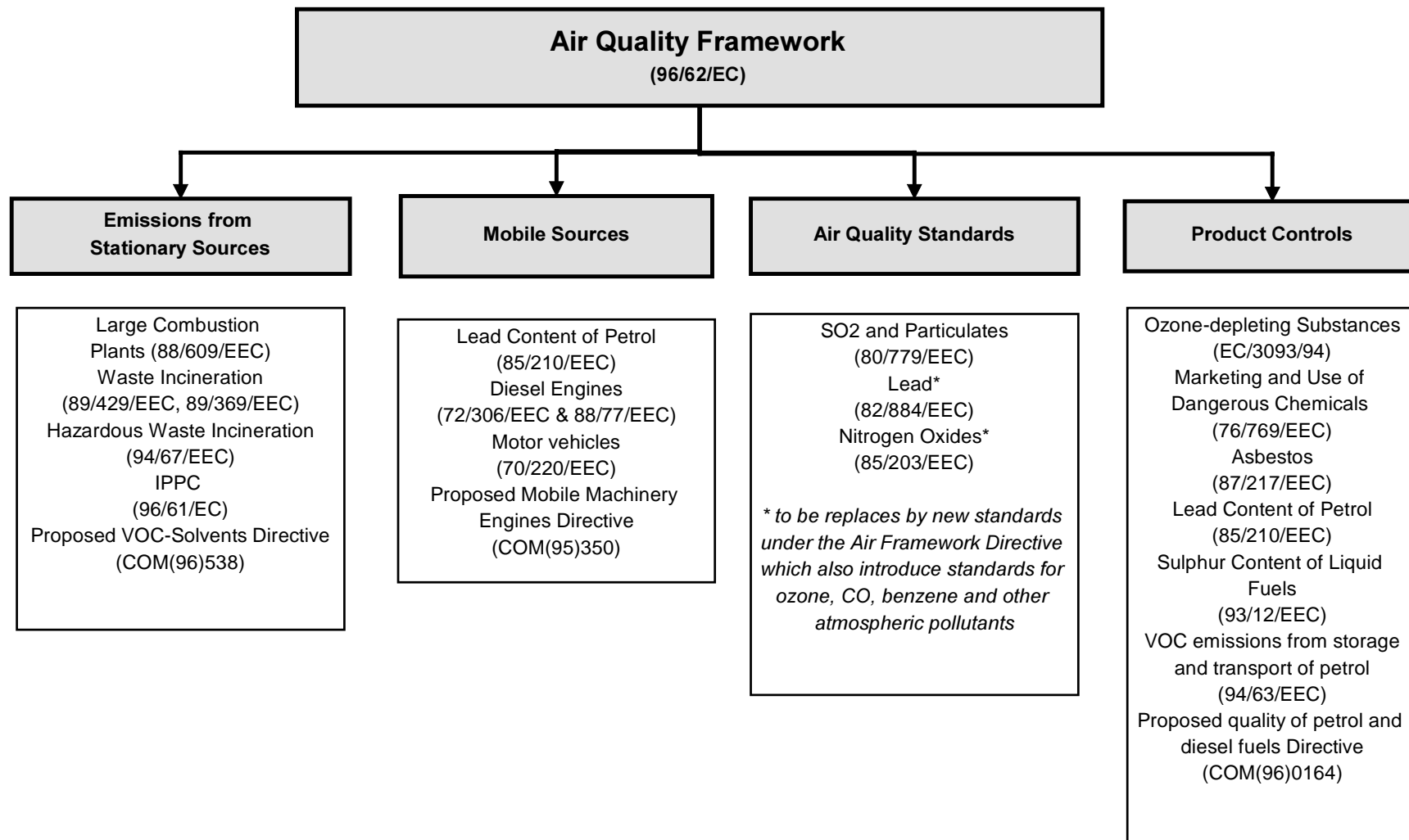
Directive 96/62/EC on ambient air quality assessment and management, known as the Air Quality Framework Directive, aims to set the basic principles of a common strategy which:

- Defines and establishes objectives for ambient air quality in the Union in order to avoid, prevent or reduce harmful effects on human health and the environment as a whole
- Assesses the ambient air quality in Member States on the basis of common methods and criteria
- Produces adequate publicly available information about ambient air quality and ensures that it is available to the public by means of alert thresholds, etc.
- Maintains ambient air quality where it is good and improves it in other cases.

Member States are responsible for:

- Implementing the directive
- Assessing ambient air quality
- Ensuring the accuracy of measurement
- Approving measuring devices

- Analysing assessment methods
- Co-ordinating on their territory the Unionwide quality assurance programmes organised by the Commission.



The framework directive will set key pollution management parameters for the private sector. New standards will be adopted under the directive which will replace earlier directives concerning sulphur dioxide and particulates, lead and nitrogen oxide, described below.

Over a period of ten to fifteen years, optimal ambient air quality limit values, margins of tolerance, assessment procedures and reporting requirements will be established for individual pollutants through a series of daughter directives. The first of these forthcoming daughter directives concerning NO₂, SO₂/particulates and lead is foreseen to be adopted by the Commission in Autumn 1997.

Once limit values and alert thresholds have been determined, ambient air quality will have to be assessed. Action plans must be drawn up for zones which do not meet the limit values. Measures must integrate the protection of air, water and soil and be aimed at meeting deadlines. The public must be informed when alert thresholds are exceeded.

Implementation considerations

1. The directive's requirements presuppose adequate administrative systems, scientific know how and standards-based regimes for the management of ambient air quality.
2. Countries should compare the framework directive's requirements with existing national laws and operational systems, existing approaches for achieving ambient air quality objectives, methodologies for air quality assessment, the availability of information listed in Annex IV and the means of improving air quality in order to determine what changes are necessary.
3. Often new procedures of consultation between authorities, alignment of monitoring and measuring methodologies, reporting and assessment will be needed.
4. Laboratories must be accredited in a manner consistent with European standards for quality assurance. Both laboratories and measuring sites must have organised systematic internal quality controls.
5. Air quality improvement plans must be developed for areas of poor air quality with specific improvement deadlines. The plans may provide for measures to control or suspend activities such as motor vehicle traffic which contribute to the limit values being exceeded.
6. Representatives from air polluting industries as well as other interested parties should be consulted on implementation requirements, especially on the drawing up of the improvement plans so as to smooth the way to compliance with air quality standards.

B.2 Existing Air Quality Standards which will progressively be replaced by Daughter Directives under the Framework Directive.

Sulphur Dioxide and Suspended Particulates

Directive 80/779/EEC on air quality limit values and guide values for sulphur dioxide and suspended particulates established binding annual and winter limit values and non-binding guide values for sulphur dioxide and suspended particulates in the atmosphere. Its main purpose was to protect human health and limit values were based on findings of the World Health Organisation.

Implementation considerations

1. Countries need to assess whether there are operational measuring stations at sites where pollution is expected to be the greatest. Those measuring stations need to use reference methods for sampling and analysis of sulphur dioxide and suspended particulates. Additional measuring stations may be required.
2. Procedures need to be put in place to allow data compilation and analysis at national level and reporting to the Commission.
3. Procedures need to be put in place to ensure that in case the concentrations exceed the limit values in Annex I, the Commission is informed and plans are developed for the progressive improvement of the quality of air in those zones. This requires identification of the main sources of pollution and an assessment of emission reduction possibilities.

Lead

Council Directive 82/884/EEC prescribed a maximum limit value for lead concentrations in air to protect human health, but insufficient technical and scientific information was available at the time to set limit values for environmental protection.

Implementation considerations

1. Countries need to assess whether there are operational measuring stations at sites where individuals may be exposed continually for a long period and where there is a likelihood that the threshold limit value for lead is exceeded. Those measuring stations need to use a conforming methods for sampling and analysis.
2. Procedures need to be put in place to allow data compilation and analysis at national level and annual reporting to the Commission.
3. Procedures need to be put in place to ensure that in case the concentrations exceed the limit values, the Commission is informed and plans are developed for the progressive improvement of the quality of air in those zones. This requires identification of the main sources of pollution and an assessment of emission reduction possibilities.

Nitrogen Oxide

Directive 85/203/EEC laid down binding limit values designed to protect human health and non-binding guide values to improve the protection of human health and contribute to the long-term protection of the environment. The guide values are intended to serve as reference points for the establishment of specific schemes in zones determined by the Member States.

Implementation considerations

1. Countries need to assess whether there are operational measuring stations at sites where the limit value is likely to be exceeded. Additional measuring stations may be required.
2. Procedures need to be put in place to allow data compilation at national level and reporting to the Commission within six months after each calendar year.

3. Procedures need to be put in place to ensure that in case the concentrations exceed the limit values, the Commission is informed thereof and that plans are developed for the progressive improvement of the quality of air in those zones. This requires identification of the main sources of pollution and an assessment of emission reduction possibilities.

Tropospheric Ozone Pollution

As ground-level ozone levels are increasing, mainly due to the increase in motor vehicle traffic in the EU, Directive 92/72/EEC required the Member States to establish an ozone monitoring network. It set health and vegetation protection thresholds for ozone and required each Member State to warn the population when these thresholds were exceeded. Threshold exceedances had to be notified to the Commission on a monthly basis.

During the course of 1998, the Commission intends to come forward with a proposal for a Directive within the context of the Air Quality Framework directive, establishing limit/target values for tropospheric ozone together with very precise monitoring requirements. When the provisions of this foreseen new directive start to enter into force it will progressively replace the provisions of Directive 92/72/EC.

Implementation considerations

1. Countries need to assess whether there are operational measuring stations at sites where the threshold values are likely to be exceeded. The sites need to be selected in accordance with Annex II and need to use a reference method for analysis in accordance with Annex V. Additional measuring stations may be required.
2. Procedures need to be put in place to ensure that in case the concentrations exceed the limit values, the public is informed in accordance with Annex IV, and the Commission is informed by the end of the following month.
3. Procedures need to be put in place to allow data compilation at national level and annual reporting to the Commission.

B.3 Emissions from Mobile Sources

Light duty motor vehicles

The base-directive 70/220/EEC lays down the technical requirements and the limit values for carbon monoxide and unburnt hydrocarbon emissions from the engines of motor vehicles. These requirements were made much more stringent over the past 25 years by a series of amending directives. The limit values were first reduced by Directive 74/290/EEC and supplemented, with Directive 77/102/EEC, by limit values for nitrogen oxides. The limit values for these three types of pollution were successively reduced by Directives 78/665/EEC, 83/351/EEC and 88/76/EEC, whereas limit values for particulate pollutant emissions from diesel engines were introduced by directive 88/436/EEC. More stringent European standards for the emissions of gaseous pollutants of motor vehicles below 1400 cm³ were introduced by Directive 89/458/EEC. These standards have been extended by Directive 91/441/EEC to cover all passenger cars independently of their engine capacity, including requirements relating to evaporative emissions and to the durability of emissions-related

vehicle components as well as more stringent particulate pollutant standards for motor vehicles equipped with diesel engines.

Directive 94/12/EC introduced more stringent limit values for all pollutants and a modification of the control of conformity of the production. Passenger cars designed to carry more than six passengers and having a maximum mass of more than 2500 kg, light commercial vehicles, and such off-road vehicles, which previously benefited from less stringent standards, have been submitted by directive 93/59/EEC and directive 96/69/EC to standards as severe as the respective standards for passenger cars, taking into account the specific conditions of these vehicles.

The Auto-Oil programme

Directive 94/12/EC requires that the Commission proposes standards to be enforced after the year 2000, according to a new multi-faceted approach, based on a comprehensive assessment of costs and efficiency of all measures aimed at reducing roadtransport pollution. Besides tighter car emission standards, the proposal should include complementary measures, like an improvement in fuel quality and a strengthening of the car fleet inspection and maintenance programme. The proposal should be based on the establishment of air quality criteria and associated emission reduction objectives and an evaluation of the cost/effectiveness of each package of measures, taking into account the potential contribution of other measures such as, inter alia, traffic management, enhancement of urban public transport, new propulsion technologies, or the use of alternative fuels. The necessary background investigation and research were carried out within the European Auto-Oil Programme.

The corresponding proposal for an amending directive, COM/96/0163 (COD), on emissions from light duty motor vehicles covered by the scope of the base-directive 70/220/EEC, was presented in June 1996 and is presently discussed in the European Parliament and the Council.

In parallel a proposal for a directive, COM/96/0164 (COD), laying down new requirements to improve the quality of motor fuels was presented by the Commission. This proposal is also under discussion in the European Parliament and the Council. (See B.7).

However, in order to achieve the air quality criteria laid down in the Auto-Oil programme , additional cost/effective local measures will nevertheless be needed in the most polluting areas.

Heavy duty diesel engines for motor vehicles

Directive 88/77/EEC established emission requirements for carbon monoxide, hydrocarbon and nitrogen oxides. Besides a strengthening of the original limits introducing a two stage approval to be implemented in year 1993 and year 1996, requirements for particulate emissions were set with amending directive 91/542/EEC. Amending directive 96/1/EC allowed for some derogation on the particulate emission limit of smaller engines. In context with the approach explained above a new proposal is currently being prepared in order to introduce stricter requirements from the year 2000 onwards.

Emissions from engines to be installed in mobile machinery

A proposal for a new directive, COM 95/350 (COD), setting emission requirements for carbon monoxide, hydrocarbon, nitrogen oxides and particulates on mobile machinery diesel engines is presently under discussion in Council and the Parliament and is expected to be adopted shortly.

Smoke emissions from diesel engines of motor vehicles, agricultural and forestry tractors

Directives 72/306/EEC and 77/537/EEC set standards for maximum capacity of diesel exhaust smoke. The main purpose of these standards is the establishment of reference values for roadworthiness testing mentioned below.

Implementation considerations

1. Countries will have to determine the type-approval authorities as defined in Directive 70/156/EEC and its amendments.
2. Where necessary the type-approval authorities can delegate technical work to accredited technical services that can be situated in any Member State.
3. For advice on how to establish effective administrative structures, type-approval authorities and technical services, preferably in Member States which have dealings with a large national automotive industry, should be consulted.

Air Quality Framework Directive – Implementation considerations

National Legislative Framework

- Compare directive's requirements to existing national laws and regulations
- Identify legislative gaps
- Options:
 - One main legislative tool (Air Quality Act)
 - Include in Environmental Protection Act
 - Amendments to multiple laws

Competent Authorities (CAs)

- Determine CAs for legal and administrative purposes
- National level CA will report to Commission on implementation
- Identify monitoring institutions and needs
- Define planning procedures and implementation controls
- Ensure transparency of decision-making, appeals and review of decisions
- Prepare Air quality improvement plans where needed

Legal Checkpoints

- Ensure monitoring, compliance, enforcement and reporting procedures.
- Ensure implementation of time limits fixed for air quality limit values.
- Provide full disclosure to the public where there are air pollution exceedances.

The Standards Process

- Follow EU development of air quality objectives for the 14 pollutants listed in the Directive
- Be aware of timelines for the implementation of limit values which can vary from 10 to 15 years
- Determine when concentrations are between long term limit values and temporary tolerant values. Take action to meet long term limit values
- Monitor compliance

Stakeholders

- Ensure that prior to air quality law creation, all parties including local government, affected government departments (e.g., transport), industry representatives, and the public are given the opportunity to comment.
- Make all Air Quality laws and guidelines publicly available.
- Ensure that ambient air quality limit values become a key planning tool for industry.

Financial Considerations

- Member States to provide permitting authorities, monitoring and control
- Affected industry to pay costs of compliance.

Roadworthiness Test for Emissions Directive

Directive 77/143/EEC on road worthiness tests for motor vehicles and their trailers, as amended by directive 92/55/EEC, requires testing vehicle emissions in regular roadworthiness tests for the control of carbon monoxide (CO) and the air-fuel ratio for petrol fuelled vehicles and of the opacity of the exhausts from diesel vehicles.

Implementation considerations

1. The roadworthiness tests shall be carried out by the State, or by a public body entrusted with the task by the State or by bodies or establishments designated and directly supervised by the State, including duly authorized private bodies.
2. In particular, when establishments designated as vehicle testing centres also perform motor vehicle repairs, Member States shall make every effort to ensure the objectivity and high quality of the vehicle testing.
3. Advice should be requested from public or entrusted bodies of those Member States which have them in place for a long time and thus ensuring comprehensive experience and expertise.

B.4 Volatile Organic Compounds Emissions

Directive 94/63/EC aims to control emissions of volatile organic compounds (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations. It applies to the operations, installations, road vehicles, trains and inland waterway vessels used for the storage and transportation of petrol from one terminal to another or from a terminal to a service station. The provisions of this directive are currently being revised.

Implementation considerations

1. Countries need to establish laws, monitoring and enforcement systems for meeting the emission limits for petrol vapour from storage tanks and mobile containers: trucks, trains and inland waterway vessels.
2. Nationally harmonised testing procedures must be applied by competent authorities monitoring terminals and service stations, as well as vehicles and vessels for the transport of petrol.
3. Countries must implement a range of technical and management requirements to minimise vapour losses from the handling of petrol at terminal and service stations and during transport.
4. Prior consultation with industry and other interested groups is advised.

B.5 Lead Content of Petrol

Directive 85/210/EEC on the lead content of petrol allows Member States to reduce the permitted lead content to 0.15 g Pb/l as soon as they consider it appropriate; they must ensure the availability and balanced distribution of unleaded petrol having a content below 0.013 g Pb/l). The benzene content of both leaded and unleaded petrol may not exceed 5.0%. Unleaded petrol must be clearly labelled at the pump. Countries may prohibit the marketing of leaded petrol which does not meet prescribed octane levels.

The provisions of this directive will be replaced from the year 2000 by the requirements of the proposed directive on the quality of petrol and diesel fuel, COM 96/0164 (COD), (see B.7).

Implementation considerations

1. Countries must have the administrative apparatus, including sampling and statistical interpretation methodologies, for testing lead and benzene content levels and punishing non-compliance. To ensure consistency on a national basis, labelling requirements should be established and administered by the Central Authority.
2. In order to achieve compliance, both local manufacturing and retail sector monitoring of lead, benzene and octane levels in petrol as appropriate, should be targeted. This can be supplemented with random spot testing of imports through border checks and at the retail pump site.
3. Countries should conduct discussions on implementation options with representatives of the oil and gas sector as well as other interested parties.

B.6 Sulphur Content of Liquid Fuels

Directive 93/12/EEC relating to the sulphur content of certain liquid fuels sets limits on the sulphur content of diesel fuel and other gas oils. Diesel fuel is used in some motor vehicles. Gas oil, also known as light fuel oil, is used for self-propelling vehicles, heating, industrial and marine purposes.

With regard to diesel fuel used in road vehicles the provisions of directive 93/12/EEC will be replaced by the requirements of the proposed directive, COM 96/0164 (COD), on the quality of petrol and diesel fuel (see B.7).

With regard to gasoil and heavy fuel oil, the Commission has recently made a proposal to revise the provisions of directive 93/12/EEC.

Directive on Emissions from Motor Vehicles – Implementation Considerations

National Legislative Framework

- Compare directive requirements to existing national laws.
- Identify legislative gaps.
- Options:
- One main legislative tool (Motor Vehicle Act);
- Adapt a section of the relevant legislation governing air emissions (e.g., Environmental Protection Act or Air Act).

Competent Authorities (CAs)

- The National Authority should assume responsibility for uniform emission standards, overall quality assurance and tax administration issues.
- Local CAs could manage local emissions monitoring and enforcement activities.
- National CA to observe reporting duties to Commission.

Legal Checkpoints

- Develop a regulatory regime which can cope with frequent emissions reduction measures.
- Key measures include legislative apparatus for emissions reductions, tax incentives, new technologies, inspection and maintenance procedures.
- Consider local monitoring and enforcement measures.

Compliance Procedures

- Authorised CA personnel could operate national inspection centres for new car fleets.
- CA to ensure compliance with production line vehicle emission conformity certificates.
- Petrol stations must be spot-checked concerning fuel nozzle sizes, petrol vapour recovery from refuelling of underground storage tanks and octane requirements.
- Consider licensing local private technical bodies to issue individual vehicle emissions compliance and vehicle maintenance requirement documents.

Stakeholders

- Ensure that prior to the development of the regime stakeholders are consulted over emissions standards, new technologies, technical requirements and compliance procedures.
- Stakeholder should include members of the wholesale and retail oil and gas industry, vehicle manufacturers and retailers, other government departments (e.g., Transport), NGOs and other affected parties.
- Regular public communications.

Financial Considerations

- Government to establish CA and administrative support, public communications, information and advice to industry.
- Tax incentives to encourage innovation and to reduce emissions.
- Vehicle manufacturers and retailers to pay for compliance certificates and inspection measures.
- Vehicle owners to pay reasonable costs of individual vehicle compliance.

In order to reduce sulphur dioxide pollution, particularly ground level concentrations in urban areas, the directive imposes maximum sulphur by weight limits for gas and diesel oils. Further reductions in sulphur by weight limits and related emission standards for diesel engines are anticipated¹³. The directive does not apply to gas oil intended for further processing or contained in the fuel tanks of vehicles crossing a frontier between an EU Member State and a non-EU country. New limits on the sulphur content of diesel fuel will be introduced under the Auto-Oil programme.

Implementation considerations

1. Countries must have the administrative apparatus, including sampling and statistical interpretation methodologies, for testing sulphur content levels and enforcing the requirements.
2. Representatives for the motor vehicle industry and other interested parties should be consulted on implementation methodologies in order to avoid compliance problems.

B.7 Proposal for a directive on the quality of Petrol and Diesel Fuels

This proposed directive, COM 96/0164 (COD), which is scheduled to enter into force as from 1st January 2000 lays down specifications for the quality of petrol and diesel fuels. With regard to petrol the parameters for which specifications are established include benzene content, sulphur content, aromatics, oxygen content, and distillation characteristics. In the case of diesel the parameters concerned include density, cetane number and sulphur content. By June 1999, the Commission will bring forward proposals to establish fuel specifications for 2005.

¹³ The Commission has proposed a strategy to combat acidification of soil and water, together with legislation to limit the sulphur content of fuel which introduce generalised 1% ceiling on sulphur content from the start of 2000 (COM(97) 88 final).

C. WASTE MANAGEMENT

The overall structure for an effective waste management regime is set out in the **Waste Framework Directive** and the complementary **Hazardous Waste Directive**. These directives establish the framework for waste management structures, which have been complemented by other more specific directives: One group sets down requirements for the permitting and operations of **waste disposal facilities**. The other group deals with **specific types of waste** such as oils, packaging and batteries. For the shipments of waste, the rules that apply are contained in the Waste Shipments Regulation.

C.1 Framework Directive on Waste

Council Directive 75/442/EEC on Waste, as amended by Council Directive 91/156/EEC, provides the basic framework for waste management in the European Union. The Directive requires Member States to ensure that waste is recovered and disposed of without endangering human health or causing harm to the environment. Member States are required to prohibit the abandonment, dumping or uncontrolled discharge of waste.

The Directive provides for common definitions of relevant terms such as “waste”, “disposal” and “recovery” and sets the framework for Community Waste legislation as a whole. A non-exhaustive list of wastes, known as the European Waste Catalogue, was drawn up under the Directive in Commission Decision 94/3/EC.

The Directive sets out a hierarchy of waste principles according to which Member States are required to give priority to the prevention or reduction of waste and its harmfulness. Where this is not possible, Member States should encourage recovery of waste through operations such as recycling. Disposal by landfilling or incineration without energy recovery are on the lowest rung of the hierarchy.

Member States are required to establish an integrated and adequate network of disposal installations to enable the Community as a whole to become self-sufficient in waste disposal. Member States are also required to move towards self-sufficiency themselves. The Directive further outlines that, in accordance with the polluter-pays principle, the cost of disposing of waste must be borne by holders of waste and/or producers of the products from which the waste came.

Furthermore, the Directive requires that the national competent authorities draw up waste management plans covering elements such as the type, quantity and origin of waste to be recovered or disposed of, identification of suitable disposal sites or installations and special arrangement for particular wastes.

To ensure that waste is managed in accordance with the principles of the Directive, national competent authorities are required to set up permitting procedures for the control of establishment and undertakings which dispose of or recover waste. Establishments and undertakings carrying out waste collection or transportation functions or acting as a dealer/broker/ of waste are not required to obtain a permit, but are required to be registered with the national competent authorities. To supervise these operations the Directive also requires waste disposal and recovery operators to make records of the operations available for the competent national authorities. The authorities are also required to carry out periodic inspections”

Implementation considerations

1. The EU waste management system presuppose adequate administrative systems on national, regional, and local levels, as well as adequate infrastructure for safe collection, sorting, transport, recycling, materials and energy recovery, and disposal of all types of waste.
2. When preparing national laws, particular attention should be given to the implementation of EU definitions. Terms such as “waste”, “disposal” and “recovery” need to be carefully and accurately implemented., Attention should be paid to the European Waste Catalogue. Whilst it is not an exhaustive list of wastes, reference to it is necessary for the understanding of the Hazardous Waste List (see further comment under section below dealing with Council Directive 91/689/EEC on Hazardous Waste)³ Competent National Authorities should be designated at the national, regional and local level with the technical abilities to control waste management in the national territory. A central obligation of the Directive is for competent national authorities to ensure that where waste arises, it is recovered and disposed of without causing harm to the environment or endangering human health. They must also ensure that the abandonment, dumping and uncontrolled disposal of waste is prohibited.

4 Competent national authorities will need to draw up waste management plans for their territory, based on a sound knowledge of waste arising and the recovery and disposal options available for that waste. These plans should be drawn up at an early stage as an overall strategic guide.

5 The competent national authorities will need to set up permitting and control systems for establishments and undertakings carrying out disposal and recovery operations in their territory. Professional waste collection and transportation operators as well as professional brokers for disposal and recovery services will need to be registered with the relevant competent national authority.

6 Proper implementation will require consultation and co-operation of industry, consumers and non-governmental impact assessment under Council Directive 85/337/EEC. The waste planning process in particular should involve wide consultation and be carried out as transparently as possible.

7 Consideration should be given to different tools to achieve waste minimization. Economic measures such as taxes, charges and deposit systems could be used.”

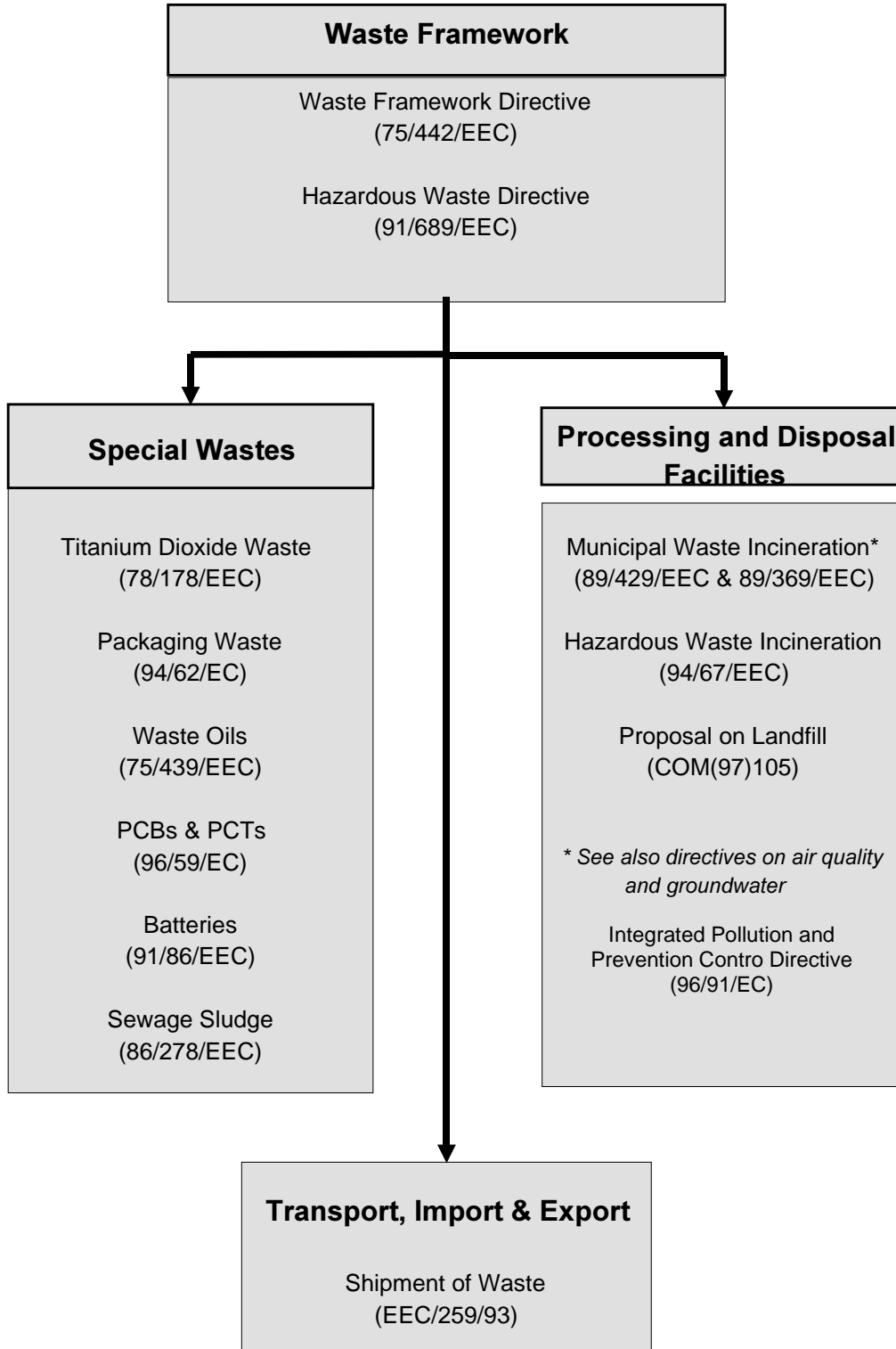
C.2 HAZARDOUS WASTE

This directive defined measures which, in addition to the Waste Framework Directive, have to be applied when dealing with hazardous waste. Hazardous wastes are those listed in Council Decision 94/904/EC which sets up an exhaustive list of hazardous wastes known as the Hazardous Waste List. This list draws from the European Waste Catalogue and indicates those wastes which are deemed hazardous. A list of constituents and properties which render waste hazardous are set out in the annexes to the Directive. For the attribution of hazardous properties, reference is made to the testing procedures of Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances as amended by Council Directive 79/831/EEC.

The Directive requires Member States to draw up plans for hazardous waste, either as part of the general plans drawn up under the Waste Framework Directive or separately. Member States are also required to ensure that every site to which hazardous waste is delivered is registered and identified and that hazardous wastes are packaged and labeled in accordance with Community and international standards. Further, Member States must ensure that hazardous wastes are not mixed with other categories of hazardous waste or with non-hazardous waste.

The Directive also tightens some of the permitting and control procedures of the Waste Framework Directive where hazardous waste is involved for establishments and undertakings carrying out their own waste disposal and those which carry out waste recovery operations. Producers of hazardous waste are also brought under the obligation of periodic inspections. Furthermore, producers of hazardous waste along with professional waste transporters are required to keep records of the hazardous waste they handle for inspection by the competent national authorities if they so request.

WASTE MANAGEMENT



Implementation considerations

1. The management of hazardous waste requires specific and stricter licensing and control procedures.
2. National rules for the correct identification and classification of hazardous waste would have to be developed, as well as requirements and guidelines for their environmentally sound recovery and disposal. National competent authorities will need to have the technical expertise to test for hazardousness of waste.
3. Technical capabilities and adequate infrastructures will have to be put in place to avoid the risk of inadequate recovery or disposal operations
4. A centralised data-bank would have to be created in order to fulfil the obligation to supply information to the EU Commission concerning hazardous waste and hazardous waste management and disposal contractors.

C.3 Shipment of Waste

Regulation 259/93/EEC on the supervision and control of shipments of waste within, into and out of the European Community establishes a system for controlling the movement of waste which implements the Basle Convention, the OECD Council Decisions on trans-frontier movements of waste, and the fourth ACP-EEC (Lomé) Convention. Whilst the Basle Convention deals only with hazardous waste, the Regulation also covers shipments of non-hazardous waste. The Regulation sets up separate regimes governing shipments within the EU, imports, exports and transit shipments and the different requirements depend on whether the waste is destined for recovery or disposal, and whether it is listed in the annexes on the green, amber or red list. In general terms, it can be said that the amber and red lists consist of hazardous waste and the green list of non-hazardous waste. These 3 lists resulted from workings of the OECD. When comparing the 3 lists of waste under the Regulation on the one hand to the European Waste Catalogue under the Framework Directive and the Hazardous Waste List under the Hazardous Waste Directive on the other, it can be seen that they are different in structure. It must however be remembered that the 3 Regulation lists were drafted for a different purpose to the European Waste Catalogue and the Hazardous Waste List and that all lists must be applied in full.

Implementation considerations

1. Member States must identify the appropriate competent authority or authorities to control the movement of wastes under the regulation; these may involve a combination of customs, industry or trade, and environmental offices.
2. They must give guidance to the competent authorities on the documentation, procedure to be followed for each type of shipment and enforcement of the controls on transfrontier shipment of waste. A uniform consignment note is provided for. Special training is likely to be necessary to supplement procedural information.
3. They must adopt procedures for informing and consulting with other countries concerning waste shipments

4. Shippers and manufacturers must be informed about the requirements and controls

C.4 Waste Disposal Installations

Hazardous Waste Incineration

The Hazardous Waste Incineration Directive 94/67/EEC is a daughter directive to the Waste Framework Directive. Member States must set and enforce operating conditions and emission limit values for hazardous waste incineration plants through permits.

A permits under the Waste Framework Directive may only be granted if the incineration plant is designed, equipped and operated in such a manner that environmental pollution prevention requirements in the form of emission limits and management controls have been met. Hazardous waste incineration plants must be operated in order to achieve the maximum level of incineration possible. Permits must list the types and quantities of hazardous waste being incinerated. Incinerator operators must receive a comprehensive description of any waste before they can accept it.

Waste water discharges are also subject to a permit process. Incineration plant sites are subject the EU Groundwater Directive 80/68/EEC. Emission limit value exceedances must be notified to the competent authority without delay and can result in reducing incineration outputs or closing the plant.

Implementation considerations

1. Guidelines for the development of new incineration plants for hazardous waste must be integrated in the national waste management and air quality strategies in order to comply with national needs and environmental quality targets.
2. Permits should apply the minimum standards set in the directives, taking local conditions into account.

Waste Framework Directive – Implementation Considerations

National Legislative Framework

- Compare Directive requirements to existing national laws.
- Identify Legislative Gaps.
- Options:
- One main legislative tool (Waste Management Act);
- Or, section of the relevant legislation governing waste management, licensing, waste flows, waste reduction.

Competent Authorities (CAs)

- CAs must have administrative systems and technical knowledge.
- The National Authority responsible for uniform waste flow and site management standards, co-ordinating waste management planning and the collection of waste statistics.
- Local CAs manage local waste management facilities and waste flows through co-ordination with the private sector as appropriate.
- National CA to observe EU reporting duties.

Legal Checkpoints

- Provide for legal division of jurisdiction of Central and local CA roles.
- Implementation of relevant definitions such as 'waste', 'disposal' and 'recovery'.
- legal considerations for drawing up waste management plans.
- Penalties for breaches of permits.
- Consider local monitoring and enforcement measures.
- Prohibition of uncontrolled dumping of waste.

Permit Procedures

- National CA to provide application forms for waste management site permits.
- Applicant to provide prescribed documentation.
- CA to ensure applicant is appropriate waste management site operator.
- CA to determine conditions which attach to permit including site closure requirements.
- CA to monitor site activities and respond to affected party complaints.
- CA to ensure that professional waste collectors, transporters and dealers are registered.

Stakeholders

- Ensure that prior to the development of the regime stakeholders are consulted on waste management needs, proposed waste planning processes and disposal/reduction options.
- Stakeholders should include representatives from waste management firms, major waste producing sectors, local government, NGOs and other affected parties.
- Ensure regular public communications about initiatives and public role in planning.

Financial Considerations

- Government to establish CA and administrative support, administration procedures (permits), public communications.
- Use incentives to encourage producer responsibility, waste minimisation and apply polluter pays principle.
- Site operators to finance permit processes.
- Households to pay for their waste disposal services.

3. Governments should develop additional emission standards in order to take into account specific technologies or potentially harmful emissions.
4. Effective waste management and control procedures must be developed in order to avoid improper or illegal use of the incinerators for incineration of kinds of waste for which they are not authorised or equipped.

Procedures should be developed for consultation and co-ordination among the different authorities responsible for the control of different types of emission to air, water and land.

5. Authorities must develop plans for the use of the heat generated by the incineration plants.
6. Programmes must be developed to ensure compliance with the directive's requirements for existing incineration plants.

Waste Incineration from New and Existing Installations

Directives 89/369/EEC and 89/429/EEC apply parallel sets of permitting requirements and operating restrictions to new and to existing municipal waste incineration plants. They are daughter directives to the Framework Directive 84/360/EEC on the combating of air pollution from industrial plants.

They regulate the permitting, design, equipment, operation, and reporting of municipal waste incineration plants. New plants are those for which an authorisation to operate was granted on or after 1 December 1990. They exclude plants used specifically for the incineration of sewage sludge, chemical, toxic and dangerous waste, medical waste from hospitals or other types of special waste, even if these plants burn municipal waste as well, because such incinerators are more stringently regulated under the Directive on Hazardous Waste Incineration.

Three levels of emission limit values for dust, certain combinations of heavy metals, hydrochloric acid, hydrofluoric acid and SO₂ are established, depending on the nominal capacity of the incineration plant. Limit values and a programme of phased improvement of existing municipal waste incineration plants within certain time limits are laid down.

They establish extensive requirements for monitoring, inspection and reporting by the operators of these plants. Information concerning the application for operating permits and the results of the monitoring must be made available to the public.

Directive 89/429/EEC on existing municipal waste incinerators gave existing incinerators until 1 December 1996 to comply with the standards for new incinerators. All other existing incinerators must meet most of the same standards as for new incinerators by the year 2000.

Implementation considerations

1. Guidelines for the development of new incineration plants must be integrated in the national waste management and air quality strategies in order to comply with environmental quality targets.
2. Countries may impose additional emission limits in order to take into account specific technologies or potentially harmful emissions.

3. Waste management and control procedures must be developed in order to avoid improper or illegal use of the incinerators for incineration of kind of waste for which they are not authorised or equipped.
4. Adequate programmes must be developed to ensure compliance with the directive's requirements for small 'existing' incineration plants.

Proposed Landfill Directive

A proposal for a Directive on Landfill is now before Parliament and the Council. The proposal will require new and existing landfills to be more tightly controlled under a detailed permitting procedure. The aim of the proposed Directive is to decrease the amount of waste going to landfill and to introduce strict standards where landfilling takes place. Under the proposal, co-disposal (the mixing of hazardous waste with municipal waste in the same landfill) would be phased out. Prices for landfill disposal must cover the costs of closing the landfill site as well as management, and also must cover at least 50 years of care after closure of the site.

In an effort to reduce EU's total methane emissions, the proposal aims to reduce the quantity of biodegradable municipal waste sent to landfills; in addition, methane from both new and existing landfills would have to be collected and used, or flared off. The proposal also introduces minimum distances for the location of landfills from residential areas.

Implementation considerations

1. As landfill is the most common and least expensive type of solid waste disposal, and standards are often lacking, it would be advisable for countries to align new legislation governing the operation of landfill sites with the proposed directive. Attention should be given to eventual amendments made to the proposal by the Council and the European Parliament.
2. The competent national authorities will need to ensure that they have the technical staff to control the implementation and enforcement of the Directive which provides for considerable detail in its permitting requirements.
3. The requirement of the proposed directive should be integrated with the national waste strategies and management plans in compliance with the Waste Framework Directive.
4. An effective strategy to minimise both the quantity and hazardousness of the waste to be landfilled will require the participation and active support of all economic and social actors. Economic incentives and educational campaigns will be needed.
5. The competent authorities will need to ensure that landfill operators have made adequate financial provision to enable them to guarantee the proper closure and aftercare of the landfill.

Hazardous Waste Incineration Directive – Implementation considerations

National Legislative Framework

- Compare directive's requirements to existing laws.
- Identify legislative gaps.
- Options:
One main legislative tool (Incineration Act)
Given the narrow scope of the directive, implementing legislation could be introduced as a separate section in the main environmental legislative instrument (e.g. Environmental Protection Act).

Competent Authorities (CAs)

- Revision of the existing administrative infrastructure to implement, administer and enforce incineration activities.
- National level CA will also have role of ensuring consistent application of the standards and requirements of the directive.
- CAs will be responsible for permitting, carrying out or supervising monitoring, information gathering, reporting to the Commission.

Legal Checkpoints

- Definition of competent authorities and permit system
- Determination of other emission limits and risk control measures
- Procedures and requirements for monitoring and enforcement.
- Notice requirements for shutdown orders.
- Penalties of incinerator operators.

Permit Conditions

- Incinerators must be designed, equipped and operated to meet minimum burn temperature requirements.
- Monitoring operation, oxygen levels, emissions limit values, waste water discharges and disposal of residues.
- Require continuous and periodic measurement systems and notification for exceedances and reporting to CAs

Stakeholders

- Ensure that stakeholders are consulted about general implementation requirements and costs, in particular about the exceedance notification procedures.
- Involve the public in the definition of information operators must supply to government
- Provide for effective communication, on an ongoing basis, of information about facilities and their operations to the public.

Financial Considerations

- Government establishes CA and administrative support, monitoring and assessment, training, enforcement, guidelines and public information.
- Operators to pay administrative costs of permit, provision of information and all costs of meeting compliance obligations.

6 The environmental impact assessment procedure may be integrated into procedures for the permitting of landfills under the proposed directive.

7 Countries will have to develop a strategy for the upgrading or the closure of existing landfill sites which do not comply with the directive's provisions. C.5 Specific Wastes

Disposal of waste oils

Council Directive 75/439/EEC aims to create a harmonised system for the collection, treatment, storage and disposal of waste oils. It allows the Member States to indemnify companies for the unrecovered costs of collecting and disposal of waste oils. It gives the highest priority to the recycling of waste oils, then to their utilisation as a fuel or in an energy recovery operation; and last to their destruction or controlled storage or tipping. Member States must ensure the safe collection and disposal of waste oils. The discharge of waste oils to waters and drainage systems is prohibited.

Any undertaking for the disposal of waste oil must obtain a permit from the competent authority. Any undertaking collecting waste oils must be registered and adequately supervised. Recycled oils may not contain more than 50 parts per million (ppm) of polychlorinated biphenyls and terphenyls (PCB/PCT).

Implementation considerations

1. The administration would have to ensure the creation of a countrywide system for the safe collection and regeneration or incineration of used oils all over the national territory. Public awareness campaigns would also have to be developed.
2. Adequate disposal structures and strict control procedure would have to be put in place in order to avoid illegal or inadequate disposal of the fractions of oil that cannot be properly regenerated.
3. An integrated/co-ordinated permitting and control system would have to be developed to ensure that operations of recovery or disposal of used oils do not impact negatively other environmental media.
4. Special measures and installations would have to be created for dealing safely with waste oils containing PCB/PCT or other dangerous substances.
5. National authorities would need to agree on the introduction of stricter requirements at national level. Information on national actions and experiences would have to be submitted to the Commission regularly.

Titanium Dioxide Waste

The Titanium Dioxide Directives 78/176/EEC and 82/883/EEC aim to prevent and progressively reduce pollution caused by waste from processing of titanium dioxide. Authorisation for dumping TiO₂ wastes in the sea may be granted only if an assessment shows that the waste cannot be disposed of by more appropriate means and no damaging effects will occur. New installations must apply the available processes and techniques which are least damaging to the

environment. Member States must submit plans to the Commission showing how they will achieve the directive's aims.

Implementation considerations

1. Review whether any facilities in the country come within the scope of the directive. However, even if no titanium dioxide processing installations exist the directive will still have to be transposed into national law.
2. Implementation should be within the framework of a national waste management system. Administrative and technical bodies will be needed to manage the strict permitting procedures and the technical controls.
3. The nature of the potential pollution caused by the TiO₂ requires careful co-operation between the authorities in charge of waste, water, and soil pollution prevention.
4. Countries may have to develop national programmes for the minimisation – and if possible the elimination – of pollution caused by the TiO₂ industry and for the total ban of waste discharge at sea or in inland water.

Disposal of PCBs and PCTs

Council Directive 96/59/EC aims at the elimination of polychlorinated biphenyls and polychlorinated terphenyls (PCBs) and at the decontamination of equipment containing them. This equipment must be inventoried, labelled and reported to the Commission by September 1999 and inventories must be updated. Equipment containing PCBs not yet decontaminated must be kept in good working order to avoid leaks.

Undertakings disposing of PCBs must be licensed in accordance with Directive 75/442/EEC. Incineration as a means of disposal must meet the standards set in Directive 94/67/EEC. Member States have to draw up disposal plans for inventoried PCBs by September 1999 and communicate them to the Commission.

Implementation considerations

1. Strict regulations and enforcing instruments would have to be created or strengthened in order to ensure the most complete identification and classification of the presence of PCB/PCT and equipment containing them within the national territory.
2. Authorities would have to draft plans for the safe decommissioning, disposal, or rehabilitation of identified contaminated equipment and installation within the timeframe set in the directive. Plans should possibly extend their scope to cover unregistered equipment possibly via the use of administrative and economic incentives established along with rigorous controls.
3. The authorities would have to ensure that no technical or administrative bottlenecks would arise in the enforcement of the requirements of the directive. This would minimise the risks linked to improper or illegal disposal especially where SMEs are concerned.

Sewage sludge used in agriculture

Council Directive 86/278/EEC aims to control the use of sewage sludge in agriculture by establishing maximum limit values for concentrations of heavy metals in the soil and in the

sludge, and maximum quantities of heavy metals (cadmium, copper, nickel, lead, zinc and mercury) which may be added to the soil.

It defines conditions for the use of such sludge: Member states must ensure that the limit values are not exceeded. Minimum time limits are set separating the use of sludge on certain types of agricultural lands and their use. Sludge and the soil on which it is used must be analysed according to the procedures set out in the annexes.

Implementation considerations

1. The authorities responsible for water treatment, waste management, agriculture and enforcement will need to work together to achieve the aims of the directive; they should agree on the timetable and targets at the early stages of planning.
2. A system of authorisation and record keeping for both the consignment and the use of sludge must be put in place and the information used for the development of national and consolidated European report on the issue.
3. The need for introducing more stringent restrictions than the ones of the directive would have to be assessed on the basis of specific national or local sensitivity to soil and water contamination.

Batteries and accumulators containing dangerous substances

Council Directive 91/157/EEC was adopted as a specific measure within the framework of Council Directive 75/442/EEC on Waste to mandate the separate collection from households of spent batteries and accumulators containing certain amounts of mercury, cadmium or lead with a view to the recovery and controlled disposal.

The Directive requires Member States to restrict the marketing of certain mercury batteries and requires them to reduce their heavy metal content, to promote the marketing of improved batteries and accumulators, to promote research and favour the use of less-polluting substitute substance in them,

They must ensure the efficient organisation of a separate collection and, where appropriate, the setting up of a deposit system. Economic instruments are allowed to encourage recycling; they must be introduced after consultation. Consumers must be fully informed about aspects of the risks and disposal opportunities.

Implementation considerations

1. Long term programmes to increase public awareness and technical development would have to be developed within or in co-ordination with the waste reduction and management plans.
2. The need for the introduction of economic instrument to maximise separate collection should be assessed; public education programmes would be helpful to ensure public co-operation in recovering and recycling waste batteries.

3. A network of collection points will have to be created. Administrative permitting and control procedures ensuring the safe transport and recovery of spent batteries are required under the Waste Framework Directive and the Shipments Regulation.

Packaging and packaging waste

Directive 94/62/EC implements the Union's strategy on packaging waste. It aims to harmonise national packaging waste management measures, to minimise environmental impacts of packaging waste and to avoid the erection of barriers to trade within the European Union. It covers packaging and packaging waste, industrial commercial or domestic, regardless of the materials used.

Recovery and recycling targets are established to be met within five years of the enactment of implementing legislation in the Member States. Such legislation must be enacted by mid-1996. By 2001, 50-65% of packaging waste must be recovered, and 25-45% of all packaging waste must be recycled with at least 15% of each packaging material being recycled.

The Directive sets the prevention of production of packaging as the first priority. Re-use, recycling and other forms of recovery (including energy recovery) are accepted as equally valid fundamental principles. Recycling includes reprocessing and organic recycling (composting), but does not include incineration.

Member States must meet the recovery and recycling targets by 30 June 2001.

Implementation considerations

1. The governments would have to assess the potential for packaging recovering and recycling at national level and set attainable targets within the ranges allowed by the directive.

2 National authorities would have to ensure the creation of a system for managing packaging and packaging waste that will ensure the attainment of these targets and other objectives laid down in the Directive.. Existing experiences are based on the creation of partially voluntary systems where the economic actors commit themselves to reaching the targets within the set deadlines before regulatory requirements are set by the authorities. The new situation will impose binding requirements on the economic operators in line with the principle of shared responsibility. Economic incentives could be established to help the development and management of the system. 3 Existing systems would have to be assessed to ensure compliance with EU requirements and avoid distortion of the free market.

Regulatory restrictions and effective controls would have to be developed to ensure compliance with the EU essential requirements and the national standards the packaging materials have to comply with.

5 A system must be developed for monitoring recycling rates and for controlling the production of packaging waste. Harmonised databases would have to be developed in order to allow comparative analysis across Europe. All these actions are to be undertaken following Commission Decision 97/138/EC establishing the formats relating to the database system.

6 Promotion of public awareness concerning generation, management, and disposal of packaging waste is required as a main element for its minimisation.

D. WATER QUALITY

Water is one of the most comprehensively regulated area of EU environmental legislation. Early European water policy began in the 1970s with the First Environmental Action Programme in 1973 followed by a first wave of legislation, starting with the 1975 Surface Water Directive and culminating in the 1980 Drinking Water Directive. This first wave of water legislation included water quality standard legislation on fish waters (1978), shellfish waters (1979), bathing waters (1976) and groundwaters (1980). In the field of emission limit value legislation the Dangerous Substances Directive (1976) and its Daughter Directives on various individual substances were adopted.

A second wave of water legislation followed a review of existing legislation and an identification of necessary improvements and gaps to be filled. This phase of water legislation included the Urban Waste Water Treatment Directive (1991) and the Nitrates Directive (1991). Other elements identified were revisions of the Drinking Water and Bathing Water Directives to bring them up to date (proposals for revisions being adopted in 1994 and 1995 respectively), the development of a Groundwater Action Programme and a 1994 proposal for an Ecological Quality of Water Directive. Also, for large industrial installations, the IPPC Directive (finally adopted in 1996) covered water pollution as well.

During this time it had become, after extended discussion at Member States' and Community level, increasingly clear that an efficient protection of water needed emission limit value legislation as well as water quality standards legislation, i.e. a so-called "combined approach". This combined approach is also in accordance with principles established in the Treaty - the precautionary principle and the principle that environmental damage should as a priority be rectified at the source, as well as the principle that environmental conditions in the various regions shall be taken into consideration.

D.1 The Proposed Water Framework Directive

In 1995 the European institutions agreed that a fundamental review and restructuring process was needed for Community water policy.

The Commission which had already been considering the need for a more global approach to water policy, accepted requests from the European Parliament's environment committee and from the Council of environment ministers . Following a wide-ranging consultation of all interested parties, such as local and regional authorities, water users, enforcement agencies, water providers, industry, agriculture and, not least, consumers and environmentalists and non-governmental organisations (NGOs) the Commission adopted, in February 1997, its Proposal for a Water Framework Directive. Its purpose is to establish a framework in order to achieve the following four main objectives of a sustainable water policy

- sufficient provision of drinking water
- sufficient provision of water for other economic requirements

- protection of the environmental
- alleviation of the adverse impact of floods and droughts.

The environmental objective of the Directive is to achieve "good status" for all groundwaters and surface waters by 2010 at the latest. To this aim, it establishes river basin management based on an assessment of the characteristics of the river basin; monitoring of the status of its surface and groundwaters; definition of quality objectives; establishment of programmes of measures to achieve the defined objective. However, the administrative structure to achieve this river basin management is left to the discretion of Member States.

The programme of measures will have to follow the abovementioned combined approach, using the setting of emission limit values and that water quality standards. In this context the full implementation of existing EU emission limit value legislation has to be provided, i.e. Urban Waste Water Treatment Directive, IPPC Directive, Nitrates Directive, Plant Protection Products Directive, Dangerous Substances Directives. In addition, the water quality standards established under the Water Framework Directive and other relevant EU water legislation (e.g. Bathing Water Directive) have to be complied with.

Further, Member States will have to ensure that services to water users are paid at full cost recovery prices (basically prices for water supply and waste water collection and treatment). The programme of measures will have to be based on all relevant water-related legislation, be it Community, national or regional legislation and we have to be legally binding.

Implementation considerations

1. Countries should orient new legislation on the requirements in the proposed Water Framework Directive, as it is meant to be the future regulatory framework for EU water policy, and may well be in force by the date of accession. Further, it will absorb and integrate older legislation such as the Surface Water Directive, and Fish and Shellfish Water Directives and the Groundwater Directive, thus allowing those to be repealed.
2. Identify river basins and establish a competent authority etc. to monitor water quality and quantity.
3. Identify surface waters and groundwaters intended and/or used for drinking water abstraction.
4. Assess the impact of human activities on surface waters and groundwaters with each river basin, taking into consideration pollution from point sources, pollution from diffuse sources, water abstraction and other human activities with an impact on water status.
5. Establish river basin management plans based on a assessment of water needs, impacts of human activities on the water bodies and setting objectives for water quality and quantity.
6. Undertake an economic analysis for each river basin, to provide, inter alia, the basic information for the necessary full cost recovery for all costs for services provided for water uses. Derogations to the principle that water should be paid for at the full cost recovery prices may be granted at national level under specific conditions defined in the Directive and following a certain procedure.

7. Establish and implement a legally binding programme of measures to achieve the objectives; such programmes comprise basis measures (implementation of a score of existing Community legislation, cost covering charges for water use etc.) as well as supplementary measures to achieve the necessary good status of waters.
8. Involve interested parties such as other relevant government departments, local communities, water utilities, industry and commerce, agriculture, consumers and environmental groups in the discussion of the river basin management plans.

D.2 Urban Waste Water Directive

Directive 91/271/EEC concerning urban waste water treatment aims to protect surface inland waters and coastal waters by regulating collection and treatment of urban waste water and discharge of certain biodegradable industrial waste water (basically from the agro-food industry).

As a rule it requires for all agglomerations above 2,000 population equivalents sewerage systems and secondary, i.e. biological waste water treatment. More advanced treatment is required for so-called sensitive areas (i.e. water bodies subject to eutrophication or in danger to become so). For certain marine waters, primary, i.e. mechanical treatment might be sufficient, provided it can be proved that the water quality is not adversely affected. The deadlines for reaching the objectives depend on the size of the agglomeration and the character of the receiving water - from 1998 to 2005. By 1998, any discharge of sewage sludge to water bodies is prohibited.

Implementation considerations

1. Assess whether you identify sensitive areas or apply / have to apply the more stringent system to your whole territory. If you identify individual sensitive areas, economic considerations must not influence this identification process.
2. Identify agglomerations which need a sewerage system and/or a treatment plant or its improvement.
3. Establish a phased implementation programme for sewerage and treatment systems.
4. Develop detailed capital investment strategies in order to cope with the expenditures needed to construct, improve or replace sewerage and/or treatment systems.
5. Assess costs for users, develop strategies for cost recovery (cf. also Water Framework Directive on full cost recovery).
6. Develop and implement strategies for the reuse and/or disposal of sewage sludge from waste water treatment, including where necessary the phasing-out of discharge or dumping to waters.
7. Assess the need for training the necessary staff for maintenance of sewerage systems and treatment plants. Countries should consider the need for training in management and financial planning as well.

D.3 Nitrates from Agricultural Sources Directive

Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources complements the Urban Waste Water Directive by reducing and preventing the nitrates pollution of water from agricultural sources, i.e. chemical fertiliser and livestock manure, both to safeguard drinking water supplies and to protect fresh water and marine waters from eutrophication.

The Directive requires each Member State to draw up at least one code of good agricultural practice which must be promoted throughout the territory. The measures in it are not mandatory.

On the basis of the results from monitoring networks specified in the Directive, zones vulnerable to nitrate pollution from agricultural sources have to be identified. In these zones action programmes have to be implemented consisting of mandatory measures, in addition the codes become mandatory. Member States can decide to apply the measures in the action programmes across their whole territory, in that case they do not have to identify vulnerable zones.

Implementation considerations

1. Member States should assess whether they should identify vulnerable zones (taking the scientific/technical efforts into consideration) or apply the more stringent system to the whole of their territory and designate accordingly.
2. Establish measuring and monitoring systems for surface waters and groundwater. Designate the necessary authorities for implementation.
3. Establish codes of good agricultural practice for training of farmers.
4. Establish and implement action programmes for the vulnerable zones (or the whole territory; see 1 above).
5. Review designations and effectiveness of action programmes periodically.

D.4 Dangerous Substances Discharges

Directive 76/464/EEC on pollution caused by certain dangerous substances discharged into waters requires Member States to control all emissions of dangerous substances by a permit or authorisation system. The Directive and its seven daughter Directives is oriented on individual dangerous substance or groups of substances. Daughter Directives have so far covered 18 substances at a Community level.

The Directive obliges Member States to set maximum emission limit values established in these Directives. However, as an alternative they allow Member States to control pollution by complying with water quality standards established in the same Directive and thus derived emission limit values.

For those industrial installations covered by the IPPC Directive, the emission limit values under the Daughter Directives are in any way mandatory. Moreover, the proposed Water Framework

Directive will establish the water quality standards under those Directives as mandatory as well, thus implementing the combined approach (see Water Framework Directive). For sources not covered by the IPPC Directive, a revision of relevant legislation is presently ongoing.

Implementation considerations

1. Establish permit or authorisation procedures for industrial waste water discharges, their requirements being coherent with the IPPC Directive and the proposed Water Framework Directive.
2. For all dangerous substances listed in list II pollution reduction programmes have to be established and implemented.
3. Evaluate and upgrade in co-operation between authorities and industry the expertise in pollution control technology, environmental toxicology, effluent monitoring and inspection procedures through appropriate training courses.
4. Collect data on emission limit values and water quality standards in other EU Member States for those substances and parameters where they not been set at a Community level.

D.5 Drinking Water Directive

Directive 80/778/EEC relating to the quality of water for human consumption is designed to safeguard human health by establishing strict standards for the quality of drinking water. Member States have to monitor drinking water quality and take the necessary steps to ensure compliance with the mandatory standards. In its annexes, the Directive provides the parameters and parametric values, patterns and frequencies of analyses, and reference methods of analysis.

A revision of the Directive proposed by the Commission is presently being negotiated in Council and the European Parliament. The objective of the revision is to bring legislation up to the state of science and experience, to review the parametric values and to improve the management structure under the Directive.

Implementation considerations

1. Establish a system of monitoring, sampling and testing drinking water including tap water, bottled water and water used in food production. However, it is left to Member States whether they organise this on a national, regional or local level.
2. Identify drinking water supply systems that do not comply with the mandatory standards. Establish a phased programme for compliance by measures such as addressing the source of pollution, changing the source of supply or treating the water before supplying it to distribution systems.
3. Develop detailed capital investment strategies in order to cope with the expenditures needed to construct, improve or replace the necessary distribution and/or treatment systems.

4. The problems of nitrates and pesticides from agricultural sources, as well as lead from lead distribution systems, may deserve special attention, as it has been the greatest
5. Assess costs for users, develop strategies for cost recovery (cf. also Water Framework Directive on full cost recovery).
6. Assess the need for training the necessary staff for maintenance of drinking water distribution and treatment systems. Countries should consider the need for training in management and financial planning as well.

D.6 Surface Water for Drinking Water Abstraction Directive, Measurement and Sampling of Surface Waters Directive and Information Exchange Decision

These directives belong to the first wave of European Water legislation adopted during the 1970s. All three directives will in future be integrated into the Water Framework Directive, which will retain all the obligations established under the three existing Directives, but put them into a more coherent framework, as the scope of water protection will be expanded to include all waters, and not only those serving a specific human use.

Directive 75/440/EEC concerning the quality required of surface water intended for the abstraction of drinking water lays down requirements to ensure that it meets certain minimum standards specified in the Directive. Wherever a water body used or intended for use in drinking water abstraction does not meet the requirements, Member States have to establish and implement plans of action.

Directive 79/869/EEC on surface water measurement methods establishes the sampling and measurement procedures for the waters covered by Directive 75/440/EC.

Decision 77/795/EEC on Information Exchange establishes a common procedure of exchange of information on the quality of surface fresh waters in the EU. The Decision establishes a network of monitoring points with a monitoring regime covering several parameters. The information provided by Member States is published by the Commission in a synthesis report.

Implementation considerations

1. As these directives are expected to be integrated into the Water Framework Directive in the future, measures to transpose the existing directives should be seen in the light of progress in respect to the adoption of the Framework Directive. Awaiting that, priority should be given to should be given to the implementation of the substantive requirements such as defining waters intended for drinking water abstraction, and adequately monitoring them.

D. 7 Fish Water Directive and Shell Water Directive

Like the directives mentioned under D.6 these directives will also in future be integrated into the Water Framework Directive, which will retain all the obligations established under the two existing Directives, but put them into a more coherent framework covering all waters.

Directive 78/659/EEC on fish water quality seeks to protect those fresh water bodies identified by Member States as fish waters. For those it sets water quality standards for salmonid waters and cyprinid waters. Where the water quality in such designated waters is not in compliance with the standards, programmes to reduce pollution have to be set up. Requirements on sampling and monitoring are laid down.

Directive 79/923/EEC on shellfish water quality seeks to protect those coastal and brackish water bodies identified by Member States as shellfish waters. For those it sets water quality standards. Where the water quality in such designated waters is not in compliance with the standards, programmes to reduce pollution have to be set up. Requirements on sampling and monitoring are laid down.

Implementation considerations

1. As this legislation is expected to be integrated into the Water Framework Directive in the future, measures to transpose the existing directives should be seen in the light of progress in respect to the adoption of the Framework Directive. Awaiting that, priority should be given to the implementation of the substantive requirements of the existing directives. The main obligation will – under the forthcoming Water Framework Directive – be the establishment of an adequate sampling and monitoring system. This overall approach should also contribute to avoiding overlapping efforts in the field of measuring and monitoring.

D. 8 Groundwater Directive

Directive 80/68/EEC on the protection of groundwater pollution caused by certain dangerous substances will also in the future be integrated in the forthcoming Water Framework Directive. The Directive seeks to control the direct and indirect discharge of certain substances into the groundwater. This is to be achieved primarily by an authorisation system for discharges as well as disposal or tipping. For certain substances and groups of substances any discharge to groundwater is prohibited ("List I substances"), whilst others ("List II substances") must be subject to an elaborate authorisation procedure. Member States are to monitor compliance with the authorisation and the effects of discharges.

Implementation considerations

1. As this directive, including a ban on discharges of dangerous substances into the groundwater, is expected to be integrated into the Water Framework Directive in the future, measures to transpose the existing directive should be seen in the light of progress in respect to the adoption of the Framework Directive. Awaiting that, priority should be given to the implementation of the substantive requirements. The main obligation will – under the forthcoming Water Framework Directive – be the establishment of an

adequate sampling and monitoring system. This overall approach should also contribute to avoiding overlapping efforts in the field of measuring and monitoring.

D. 9 Bathing Water Directive

Directive 76/160/EEC on the quality of bathing waters seeks to ensure the quality of bathing water throughout the EU, both for fresh water and coastal waters bathing areas. The Directive lays down 19 physical, chemical and microbiological parameters and requires Member States to monitor their bathing areas according to set rules for sampling frequencies and parameters. Member States have to take all appropriate measures in order to comply with the mandatory quality standards laid down in the Directive.

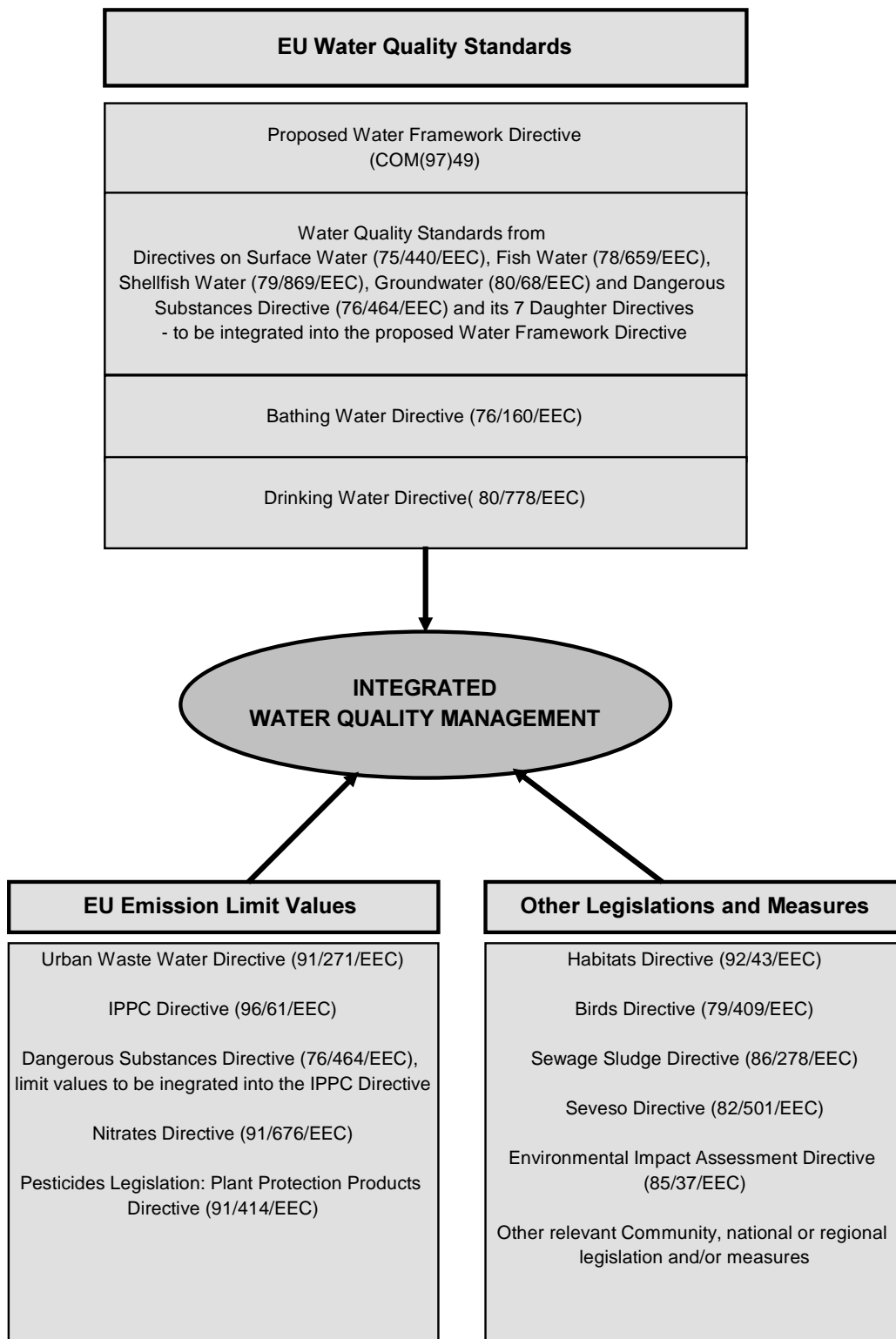
The Commission publishes an annual report on the quality of EU bathing water.

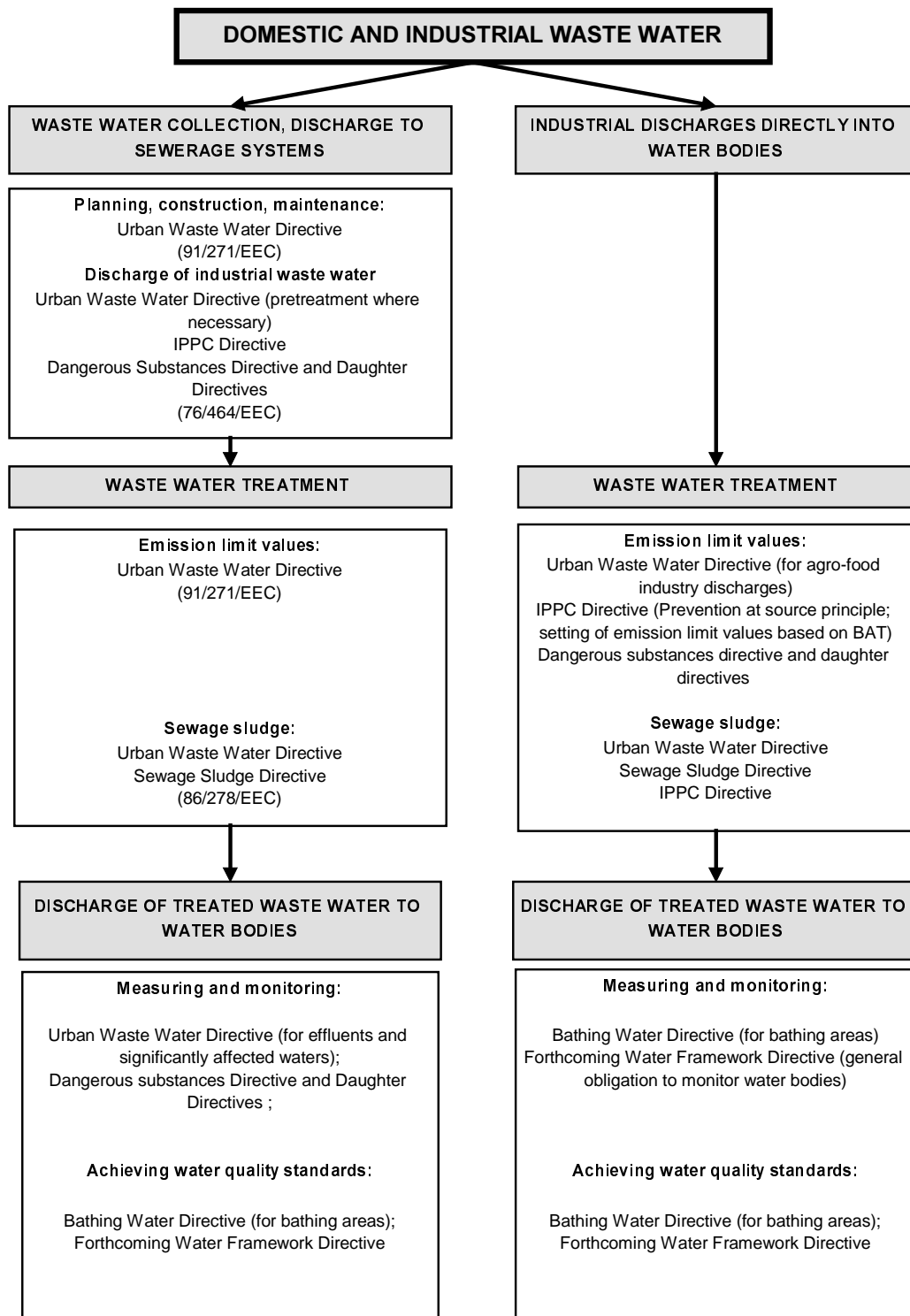
As for updating of this 1976 Directive, a proposal for a review has been adopted by the Commission.

During its work on the Water Framework Directive, the Commission has come to the conclusion that the Bathing Water Directive makes a distinct Community contribution to the integration of environmental policy and tourism policy and that it benefits from having a clear, separate identity. However, the Bathing Water Directive will be closely co-ordinated with the Water Framework Directive, as bathing waters and their associated obligations will have to be incorporated into the river basin management plans.

Implementation considerations

1. Identify bathing waters meeting the definitions of the Directive.
2. Designate an appropriate authority at national, regional or local level for sampling and monitoring.
3. Evaluate the impact on the country's obligations under the Urban Waste Water Treatment Directive on the compliance with bathing water quality standards, and decide whether further measures are needed for compliance with the quality standards.





E. NATURE PROTECTION

EU nature protection legislation consists of two principal directives and two regulations. The directives concern the **protection of natural habitats** in the European Union and the flora and fauna which inhabit them. The regulations limit the **import and trade** within the European Union in endangered flora and fauna, and establish a monitoring and inspection system for the protection of Antarctica.

The Habitats Directive 92/43/EEC has become the main mechanism for protecting European species of fauna and flora as well as their habitats. It establishes an EU-wide framework to maintain biological diversity by the conservation of natural habitats and wild fauna and flora. The Birds Directive 79/409/EEC protects wild bird species and sites of importance for the maintenance of populations of wild birds. It establishes a scheme for the protection of all naturally occurring species of wild birds in the Community, their eggs, nests, young and habitats. It requires the identification and adequate protection of breeding sites and sites of importance for migratory species, it regulates hunting seasons and practices.

Regulation EC/338/97 guarantees the fulfilment of EU nature protection obligations under the Washington Convention on International Trade in Endangered Species. It will be regularly amended to implement the decisions taken by the parties to the Washington Convention. The Seal Pups Directive 83/129/EEC bans the import of products such as shoes and clothes made with the skins of seal pups, except those killed by the Inuit people in a traditional manner.

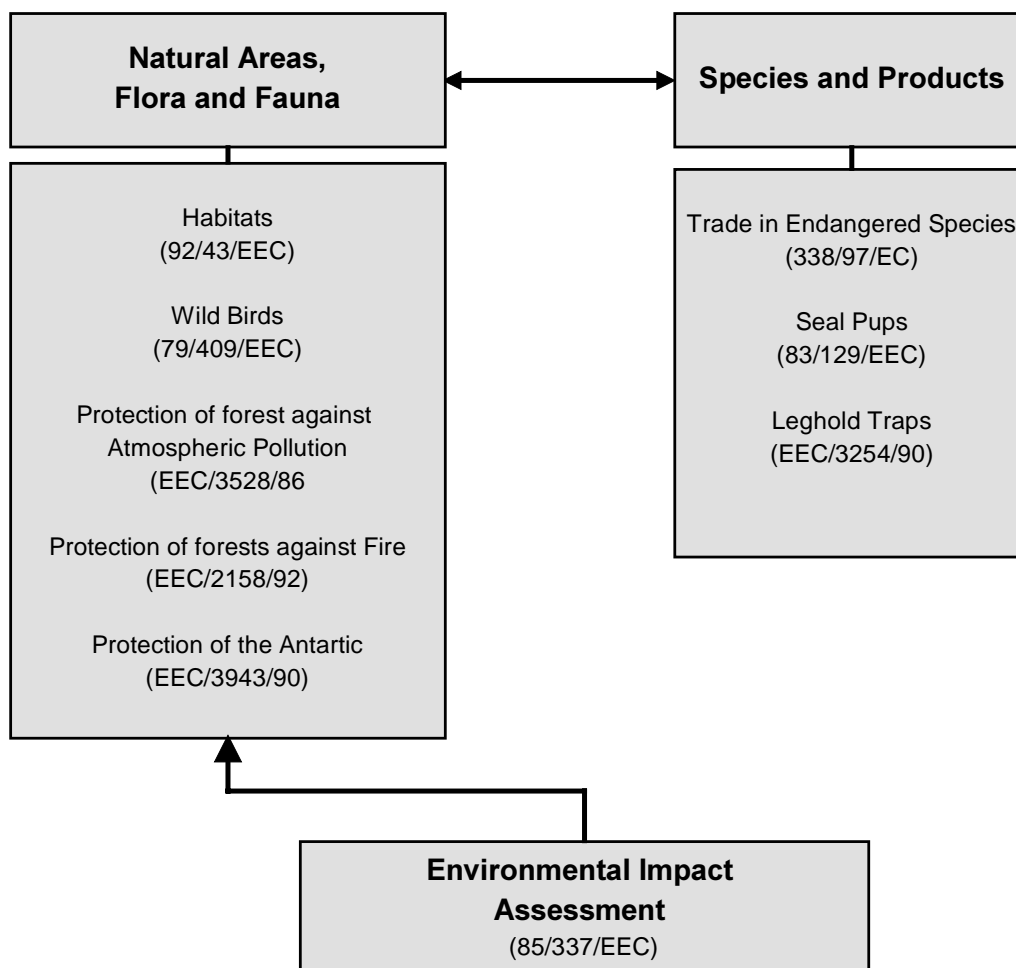
Regulation 90/3943/EEC on the **Protection of the Antarctic** implements inspection and observation requirements under the Convention on the Conservation of Antarctic Marine Living Resources.

E.1 Habitats

Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora aims for the maintenance of biodiversity within the European territory of the Member States through the conservation of natural habitats and of wild fauna and flora. Many habitat types in Europe have deteriorated and a growing number of species have become threatened or increasingly rare. The directive aims to establish a 'favourable conservation status' for habitat types and species selected as being of EU interest. This is defined broadly for both habitats and species by reference to factors such as species population dynamics, trends in the natural range of species and habitats, the area of habitat remaining and the proportion in a Member State.

An European ecological network known as 'Natura 2000' will be established. Each Member State must draw up a list of the sites within their territories which are of potential EU importance. The areas listed are in proportion to each Member State's share of the habitat type in need of protection. All sites protected under the Birds Directive 79/406/EEC, are also included in the 'Natura 2000' network.

NATURE PROTECTION



A single list of sites of EU importance will then be compiled and should be adopted by June 1998 from which time the sites are subject to particular protection obligations. These include taking 'appropriate steps' to avoid deterioration of the habitats and assessing any plans or projects which are likely to have a significant effect on the sites. A plan or project must take conservation requirements into account; in imperative circumstances of overriding public interest a site may be adversely affected, but Member States must then take compensation measures. Member States have six years to designate the sites as Special Areas of Conservation and to put in place the necessary conservation measures, including, where appropriate, the development of management plans.

Land use planning measures should include policies aiming to ensure the ecological coherence of the Natura 2000 network and to maintain landscape features of importance to wildlife, especially those which enable species migration, propagation and genetic exchange. Member States must also establish a system of strict protection for the listed animal and plant species of

EU interest. This prohibits deliberate collection, capture or killing of all such species at any stage in their life cycle or the deterioration or destruction of breeding sites or resting places.

Implementation considerations

1. Countries must designate the sites which are of EU importance so they can be subject to the necessary protection regimes.
2. There must be an appropriate assessment of any plan or project likely to have a significant effect on the sites in the light of the sites' conservation objectives; see discussion of the EIA Directive above (See Section A – Horizontal Legislation).
3. As part of the Natura 2000 European network, countries are responsible for maintaining its ecological coherence.
4. Countries must establish management and monitoring of the protected sites, as well as appropriate enforcement for violation of the protection measures.

E.2 Wild Birds

Directive 79/409/EEC on the conservation of wild birds establishes a scheme for the protection of migratory wild birds and their habitats. A general duty is placed on the Member States to maintain the population of all species of naturally occurring birds in the wild state in the EU at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements. This is to be done by preserving, maintaining or re-establishing a sufficient diversity and area of habitats; that is, by creating protected areas, managing habitats inside and outside protected areas, re-establishing destroyed biotopes and creating new ones.

Member States are required to take special measures to conserve the habitats of listed vulnerable species as well as migratory species, in particular by designating as Special Protection Areas, (SPAs), the most suitable territories for these species. Special mention is given to wetlands in this regard. The protection regime for the SPAs is now defined under the Habitats Directive

Subject to certain exceptions, Member States must prohibit deliberate killing or capture; the deliberate destruction of/or damage to nests and eggs; the taking of eggs in the wild; deliberate disturbance during breeding and rearing; and the keeping of birds whose hunting and capture is prohibited.

For particularly vulnerable species Member States must designate special protection areas, in particular wetlands. They must inform the Commission so that it can ensure that the different national measures form a coherent whole. The sale of wild birds, including any parts or derivatives of live or dead birds, is generally prohibited.

Implementation considerations

1. Countries, regardless of whether or not they have more stringent nature protection laws and practices than the European Union, will need to consider very carefully how to incorporate the international concerns, especially for habitat protection into their national systems..

2. The directive's protection requirements may require changes in the laws affecting the management and protection of natural areas, in procedures, budgets and training of local managers.

E.3 Trade in Species of Wild Fauna and Flora

Regulation EC/338/96, which came into effect on 1 June 1997, replaces the Regulation 82/3626/EC on implementing the Convention on Trade in Endangered Species (CITES). It aims to protect wild species which are or may be affected by uncontrolled trade, through protection, regulation or monitoring.

It increases the numbers of protected species. To adapt to the changed circumstances resulting from the completion of the single market and the abolition of internal border controls, it applies stricter control measures at the Union's external borders, and includes provisions to improve enforcement such as setting penalties for those who break the law and introducing policies for seizing wildlife.

Implementation considerations

1. In developing implementing legislation, a range of competent authorities must be identified. Customs offices must be given the additional responsibility of conducting checks as well as dealing with the issuance of import and export permits.
2. A management authority must be designated for the purpose of implementing the legislation and communicating information to the Commission.
3. Scientific authorities must be delegated the responsibility of representing their respective associated countries at the Scientific Review Group as well as responding to scientific questions which arise under the implementing legislation.
4. Associated countries must develop import and export permit procedures and documentation. Appropriate trade prohibitions and related procedures must also be established.
5. For particular types of species prior authorisation procedures must be developed and administered by the management authority.
6. Monitoring and enforcement procedures including prosecution for unauthorised trade in species must be developed.

E.4 Seal Pups

Member States must prohibit the commercial import of certain seal products, such as clothing. The prohibition does not apply to products resulting from traditional hunting by the Inuit people.

Implementation considerations

1. Establishment of certification procedures for imports of allowed seal pup products and inspection and enforcement procedures for the control of prohibited products.
2. Co-ordination and consultation procedures between the responsible Ministries and offices (e.g., Environment, Customs, Police)

E.5 Protection of the Antarctic

Regulation 3943/90/EC on the application of the system of observation and inspection established under Article XXIV of the Convention on the Conservation of Antarctic Marine Living Resources adopts the observation and inspection procedures called for under the Convention.

E.6 Use of leghold traps

The Regulation EEC/3254/91 is intended to assist the conservation of certain species of wild animals by banning the use of leghold traps and limiting imports of their pelts and related goods.

Implementation consideration

1. Countries shall monitor the compliance with the requirements laid down in the regulation.
2. Controls to frontier should be organised.

E.7 Protection of Forests

Against Atmospheric Pollution

Regulation EEC/3528/86 establishes a scheme to protect forests against atmospheric pollution but the aim is more accurately set out as helping Member States to establish a periodic inventory of damage and a network of observation points. It requires the establishment of a periodic Community inventory of damage to forests. It provides for the development of pilot projects and field experiments designed to improve the understanding of atmospheric pollution in forests and its effect; improve methods of observing and measuring damage and establish methods for the restoration of damaged forests.

Implementation considerations

1. Countries have to draw up forest health reports.
2. Countries shall conform to unified sampling system and centralised data treatment.
3. The Union can contribute to activities under the regulation to a maximum of 50 per cent of the activity.
4. A monitoring network shall be established.

Against Fire

Regulation EEC/2158/92 provides increased protection for forests in order to reduce the number and extend of fire outbreaks and areas burnt. It steps up efforts undertaken to maintain forest ecosystem and to safeguard the various functions which forests fulfil for the benefit of rural areas. It institutes a scheme for the protection of forests against fire.

Implementation considerations

1. Funding is made available for the implementation of the scheme.

2. Countries shall classify their territory according to the degree of forest-fire risk and forward to the Commission forest-fire protection plans for the areas classified as high risk and medium risk.
3. Countries shall prepare an assessment of the effectiveness of the different types of measures taken to reduce forest fires and submit to the Commission each year their projects or programmes for improving the protection of forests against fire.
4. Governments shall designate the departments and agencies authorised to implement measures taken pursuant to the Regulation and which the Commission is to reimburse the sums corresponding to the Community's contribution.

Habitats Directive Implementation considerations

National legislative framework

- Compare directive's requirements to existing national laws.
- Identify legislative gaps.
- Options:
One national law (Nature Protection Act)
Amendments to existing acts (nature protection acts, agriculture act, water management act, etc.)

Competent Authorities (CAs)

- Determine CAs for legal and administrative purposes.
- National level CA will likely have role of reporting to Commission on Directive developments, ensuring consistency of habitat protection.

Legal Checkpoints

- Pay special attention to the criteria used to define and select Special Areas of Conservation (SAC).
- Incorporate SAC conservation into land use planning decisions.
- Develop laws for the incorporation of environmental impact assessment processes into decision-making procedures concerning the development proposals for SACs.

The Habitat Protection Process

- Propose a list of sites based on Annexes 1 and 2.
- Communicate this list to the Commission..
- Arrive at agreement with the Commission over the sites to be protected.
- Establish, where appropriate, management plans for the sites to be protected.
- Integrate management plans into land use decisions.

Stakeholders

- Ensure that prior to site selection, all parties including local government, affected government departments, industry representatives, land developers and the public are given the opportunity to comment.
- Make site data publicly available.
- CAs to assist stakeholders in this regard by making proposed uses for the site (aside from conservation) be made known on a timely basis.

Financial Considerations

- Government provides administration
- Landholders could be given financial assistance or tax concessions to maintain conservation sites.

F. INDUSTRIAL POLLUTION CONTROL AND RISK MANAGEMENT

These directives and regulations cover three areas: control of industrial emissions, control of major accident hazards, and environmental audits and eco-labelling.

The first area includes directives which establish **requirements for permits** for the operation of certain industrial facilities so as to control releases to air and water and wastes. The directives include the Integrated Pollution Prevention and Control Directive 96/61/EEC (IPPC), the Emissions from Large Combustion Plants Directive 88/609/EEC covers emissions of sulphur dioxide, nitrogen oxides and particulates and establishes targets for the reduction of total emissions from each Member State, and the Air Pollution from Industrial Plants Directive 84/360/EEC – a framework directive which will be replaced by the much broader IPPC Directive in 2007.

The second area covers the **Seveso Directive** 96/82/EC, named after a town in Italy that was the site of a major accidental release of toxic gas. This directive, which has been a model for similar legislation outside of Europe, requires industrial plant operators to identify major accident hazards and take steps to control them and to limit their effects. It will replace the previous Directive 82/501/EEC in 1999.

The third area covers the regulations on **Eco-management and Audit Scheme EMAS** 1836/93/EEC and on **eco-label** 880/92/EEC. The EMAS Regulation encourages the voluntary participation of industrial plants in the development of internal environmental management systems and audit programmes as a means to improve their environmental performance. The eco-label Regulation establishes an EU eco-label award scheme which is intended to promote the design, production, marketing and use of products with a reduced environmental impact during their entire life cycle. The eco-label gives consumers information about the environmental impacts of products.

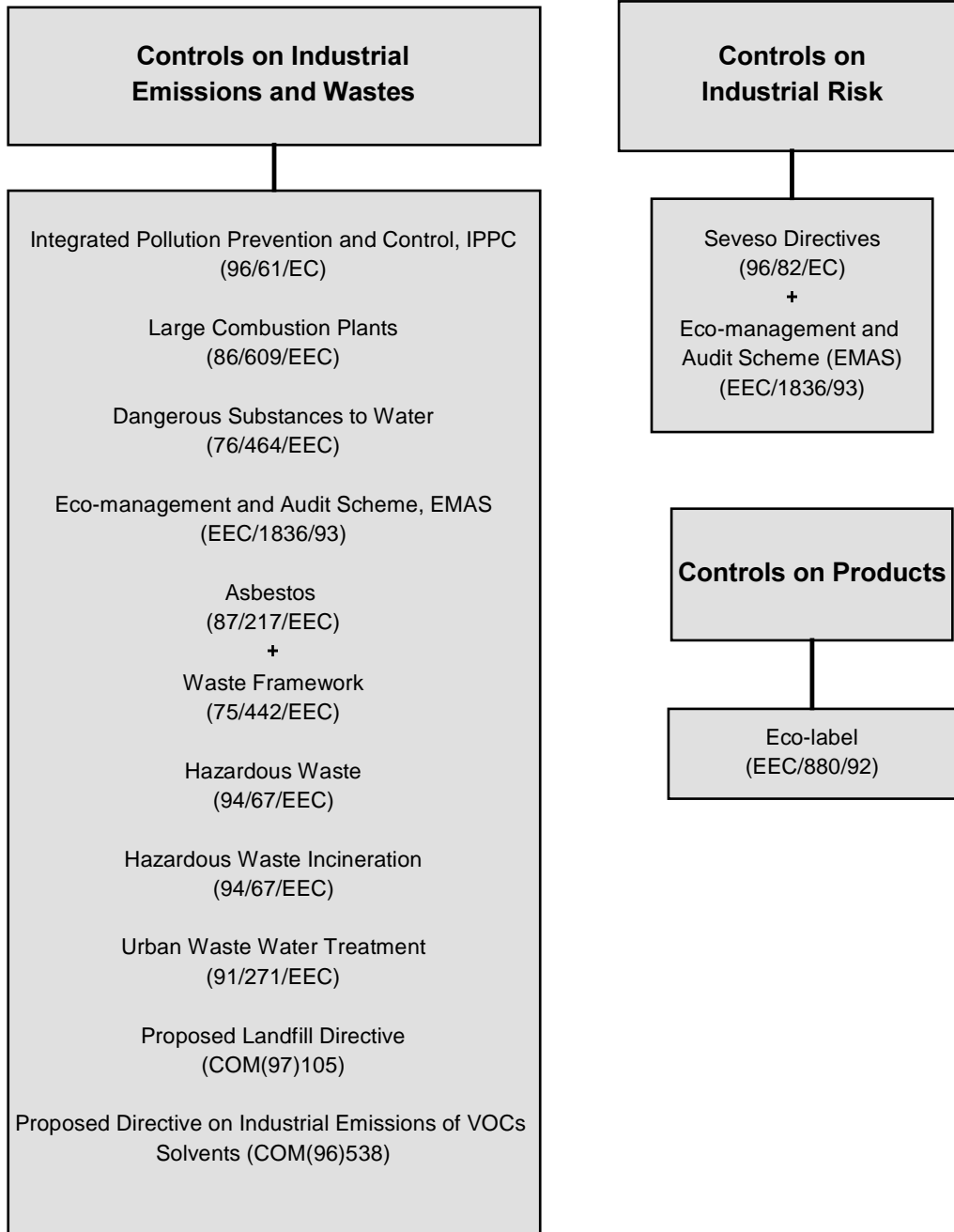
F.1 Integrated Pollution Prevention and Control

The goal of the directive is to achieve integrated prevention and control of pollution arising from a wide range of activities by means of measures to prevent or, where that is not practicable, to reduce emissions from industrial facilities to air, water and land, including measures concerning waste, in order to achieve a high level of protection of the environment as a whole.

All activities covered by the Directive require a permit. Member States may issue a single permit for releases to air, water and waste from an industrial facility, or issue multiple permits which are integrated through a co-operation procedure involving several permitting authorities. As well as imposing emission limits in environmental permits, Member States must ensure that the permits contain measures designed to ensure that following basic requirements are met:

- all appropriate preventive measures are taken against pollution, in particular through the application Best Available Techniques (BAT)

INDUSTRIAL POLLUTION CONTROL AND RISK MANAGEMENT



- no significant pollution is caused
- waste production is avoided; where waste is produced it should be recovered or, where that is technically and economically impossible, disposed of while avoiding or reducing any impact on the environment
- energy is used efficiently
- the necessary measures are taken to prevent accidents and limit their consequences
- the necessary measures are taken upon definite cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

Permits must in particular include emission limit values based on BAT, taking into consideration the potential for transfer of pollution from one medium to another. Other requirements to protect soil and groundwater and concerning waste management must be laid down if necessary. In addition, permits must contain the supplementary requirements necessary to prevent breaches of any environmental quality standard.

These requirements apply to new installations from October 1999 and to existing installations from October 2007.

Authorities must reconsider periodically and when necessary update permit conditions.

An inventory of the principal emissions and sources will be published by the Commission on the basis of data supplied by Member States.

Implementation considerations

1. Identify sites within the scope of the directive.
2. The IPPC Directive presupposes that countries have developed administrative institutions to issue environmental permits for industrial operations and scientific knowledge to administer and control regimes for the environmental management of a number of industrial sectors.
3. In evaluating implementation needs, compare the IPPC permit requirements and processes to existing national laws on environmental permitting in relation to environmental quality and emission standards.
4. As the administrative knowledge and capacity needed to implement the directive will be considerable, give consideration to ways of phasing in the EU requirements according to the availability of the capacity for implementation.
5. A good starting point is to evaluate the capacity of the existing administration to carry out the responsibilities laid down by the directive, including pollution prevention, waste avoidance, recovery and safe disposal, efficient energy use, accident prevention and de-commissioning guidelines procedures and standards.
6. Industry representatives from the energy, metal production and processing minerals, chemicals, waste management and other interested sectors should be consulted on implementation so as to smooth the way to full compliance with the new permits.

7. Permits may be issued at national, regional or local level. For small and medium enterprises it may be appropriate to pass the permitting on to local government whilst reserving permits for large-scale plants to regional or national authorities.
8. Competent authorities must define the permits based on evaluations of the design of the entire plant rather than end-of-pipe standards.
9. Competent authorities must ensure that all permits contain requirements for protecting land, air and water from environmental damage. This should involve a detailed account of how to identify and monitor air emissions.
10. The implementing states should define penalties for failure to co-operate with the competent authorities and inspectors, as well as for breaches of permit requirements. It may be appropriate to require financial bonds from industrial operators to cover decommissioning costs.
11. Public participation and the dissemination of public information are vital components of the directive. One means of making permitting information available is by posting a register of decisions and permits in relevant government offices and libraries. Linkages should be made between these requirements and the implementation of the Access to Environmental Information Directive.
12. Governments should consider how to phase in the requirements under the Directive on Air pollution from industrial plants and the Directive on discharges of Dangerous substances to water into the permits issued under the IPPC Directive over the eleven years after the IPPC directive comes into force (30 October 1996).

F.2 Air Pollution from Industrial Plants

Directive 84/360/EEC on the combating of air pollution from industrial plants is a framework directive, which will be replaced by the IPPC Directive in 2007 (See above, p. 78) Member States must ensure that the types of industrial plants listed in Annex I obtain prior authorisation from the designated national or regional competent authority before beginning operation or before any substantial alteration to the plant. Industrial plants serving national defence purposes are exempt from the directive.

An authorisation may only be issued when the competent authority is satisfied that: all appropriate measures against air pollution have been taken, including the application of Best available technology not entailing excessive cost (BATNEEC); the use of the plant will not cause significant air pollution, particularly of the substances listed in Annex II of the Directive; none of the applicable emission limit values is exceeded; and all applicable air quality limit values are taken into account.

Applications for authorisations and the decisions of the competent authorities must be made available to the public and to other concerned Member States within the framework of their bilateral relations.

IPPC Directive – Implementation considerations

National Legislative Framework

- Compare directive's requirements to existing national laws.
- Identify legislative gaps.
- Options:
 - One national law (IPPC Act)
 - Amendments to existing permitting laws for different media and activities (air, water, waste, soil protection, land use legislation)

Competent Authorities (CAs)

- National level CA must ensure consistency of permit standards for all media, Best Available Techniques for industrial sectors.
- Procedures and criteria for evaluation of permit applications, guidelines for industrial sectors and permitting authorities should be developed
- Identification of sites under the directive.

Legal Checkpoints

- Pay special attention to definition of best available techniques
- Understand compliance requirements under these existing sectoral directives pending and also after full implementation of IPPC Directive
- Establish sanctions for damage to health and environment.

The Permitting Process

- Implement the IPPC permit procedure requirements for all new installations.
- Apply an 'integrated' approach to the grant of authorisations to installations.
- Be aware of any changes in the activities of sites with permits.
- Develop standard comprehensive information form for permit applicants.
- Consider possible relationship between environmental impact assessment and IPPC procedures.

Stakeholders

- Ensure that prior to the granting of a permit, stakeholders and the public are informed and are given an opportunity to participate in decision-making process.
- CAs should provide information to the public concerning the industrial activity and its potential human health and environmental effects.

Financial Considerations

- Government sets up CA and administrative support, provides information to stakeholders and the public.
- Permit applicants to pay administrative costs for the permit.

Examples of the Allocation of Responsibilities for Permitting

Country	Issue Permits	Monitor & Inspect	Enforce	Prosecute
France	Prefect (regional office of the Central Government)	Environmental Inspectorate, Water Police	Prefect	Prefect
Germany	Regional Authority (Länder)	Regional Authority	Prosecutor	Prosecutor
Denmark	Regional or local Authority	Regional or local Authority	Regional or local Authority	Police
United Kingdom	Environment Agency	Environment Agency	Environment Agency	Environment Agency

Member States must monitor emissions from industrial plants impose conditions on them, taking into account the economic situation of the plants. They must adopt policies to ensure that existing plants covered by Annex I are gradually adapted to the best available technology. They may adopt stricter provisions.

Implementation considerations

1. Government authorities will need a continuous effort to collect data regarding emissions from authorised installations, environmental quality data and BATNEEC for different industrial sectors and production processes.
2. Consider how to manage the transition from the permitting requirements of this directive to the IPPC directive.
3. Consider how to define and update guidance on BATNEEC across different industrial sectors and activities: advice may be provided by the European Commission and by the Member States.

F.3 Large Combustion Plants

Directive 88/609/EEC on the limitation of emissions of certain pollutants into the air from large combustion plants was the first directive to be adopted under the framework Directive 84/360/EEC on the combating of air pollution from industrial plants. It applies to combustion plants for the production of energy with a thermal input of 50 Megawatts (MW) or more. The goal is to reduce emissions of SO₂, NO_x and dust from these large combustion plants. This is to be accomplished by means of a combination of provisions concerning global emissions from existing plants and strict emission limits on new plants.

For existing plants, national ceilings for SO₂ and NO_x are set according to gradual steps (1993, 1998, 2003).

Member States had to draw up programmes for the phased reduction of total annual emissions of SO₂ and NO_x from existing plants, i.e. plants whose original operating licence was granted before 1 July 1987.

For new plants, or plants whose capacity have been extended by 50 MW or more, licences for the construction or operation must contain conditions for compliance with emission limit values for SO₂, NO_x and dust and appropriate conditions for discharge of waste gases. Member States may impose tighter requirements.

If a new plant is likely to have significant effects on the environment in another Member State, the Member State must ensure that the other Member State is consulted appropriately under Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (See Section A – Horizontal Legislation).

Implementation considerations

1. Countries will need to determine total annual emissions from new as well as existing plants. This will include reporting by operators of combustion plants and scientific institutions working on behalf of the governments.

2. National emission reduction targets will have to be agreed with the European Union, and programmes have to be developed for reducing annual emissions from existing major combustion plants to achieve the national emission reduction targets. Those programmes need to be developed in close co-operation with the operators of the plants concerned.
3. Options for reducing emissions must be identified and reviewed. These might include fuel switching, energy conservation, energy saving measures and pollution abatement technologies. Careful analysis of financing limitations and opportunities will be important.
4. All licences for new plants (or extensions exceeding 50MW) have to meet requirements, including emission limit values for SO₂, NO_x and dust, requirements concerning measurement methods and equipment and requirements on what to do in case of failure of control devices, etc. Existing authorisations need to be reviewed in this regard.

F.4 Proposed Directive on VOC emissions from industry

A proposal for a Directive on limitation of emissions of volatile organic compounds due to the use of organic solvent in certain industrial activities, COM(69) 538 - final, is currently before the Council and the European Parliament.

The objective of the Proposal is to reduce the emissions of VOCs from stationary sources and, hence, to reduce tropospheric ozone. The Proposal aims at an emission cut of at least 50 % (by 2010, compared to 1990 levels) for some 20 main types of solvent-using activities. For each of these industrial sectors, it defines emission reduction targets by means of emission limit values to be achieved either by appropriate abatement technologies or by substitution solutions (low-solvent or solvent free technologies). Member States have the option to design and implement an alternative national plan achieving the same reduction.

Implementation considerations

1. Identify sites within the scope of the Directive
2. Countries need to establish monitoring and enforcement systems for meeting the emission limitations.
3. Countries must identify the installations which will need to be authorised, and those which will be registered.
4. When considering whether to use the option of a national plan, Member States should carefully assess the need for technical and industrial knowledge and administrative capacity in order to design and implement the plan, which is likely to be considerable.
5. Prior consultation with industry and other interested groups is advised.

F.5 'Seveso' Directive on the Control of Major-Accident Hazards

In 1999, Directive 96/82/EEC on the control of major-accident hazards involving dangerous substances will replace the old 'Seveso' Directive 82/501/EEC, which was developed following the 1976 accident in Italy. The 1982 Directive contained a set of obligations for industrial plant

operators as well as national authorities and the European Commission aimed at identifying and controlling the risks of major accidents from industrial installations. The new 'Seveso II' Directive has a broadened and simplified scope and strengthens the safety management and the emergency planning requirements imposed on operators of certain industrial plants. Provisions on inspection and control by competent authorities are reinforced and a new provision has been introduced, obliging the responsible authorities to take account of the objectives of the Directive in their land-use planning.

Whether an establishment falls within the scope of the Seveso II Directive will be solely determined by the presence of specified dangerous substances in sufficiently large quantities to create a major accident hazard. Installations covered by this Directive and located close to each other have to co-operate in averting risks and preventing domino effects such as a fire at one installation spreading to others.

In order to improve safety and reduce the risk of human error, operators of industrial installations concerned will have to develop a policy for major accident prevention as well as a safety management system. The operator must prepare a safety report and an internal emergency plan. The national competent authorities must prepare an external emergency plan, co-operating across borders where this is necessary to prevent or respond to major accidents..

Member States must prohibit the use of industrial installations where the prevention and mitigation measures taken by the operator are seriously deficient or where the operator does not submit the required information to the competent authority within a reasonable period of time. Public access to information is strengthened. A system of inspections must be organised by the competent authorities.

Implementation considerations

1. Administrative knowledge and capacity needed to implement the new Directive are considerable. As a first step, competent authorities need to be identified at national and at local level.
2. Procedures need to be put in place to ensure that all existing and new installations with major-accident hazards potential have taken the measures needed to prevent major accidents and limit their consequences. This requires the establishment of a registration system for notifications and the ability to assess the safety reports submitted.
3. Local authorities are responsible for drawing up external emergency plans. The development of these emergency plans requires as a basis the internal emergency plan to be supplied by the operator containing information on the establishment and the specific arrangements for emergencies. Persons liable to be affected by a major accident need to be informed. Both, internal and external emergency plans need to be practically tested and reviewed. In case of an accident, interventions need to be co-ordinated.
4. Collecting and disseminating information on accidents and near-misses is essential to allow to improve prevention methods and emergency response procedures. Procedures for the collection, exchange and dissemination of information need to be defined and established.
5. Competent authorities need to set up a programme of inspections based upon either a systematic appraisal of major-accident hazards of the establishments concerned or one on-site-inspection per year.

F.5 Eco-management and Audit Scheme (EMAS)

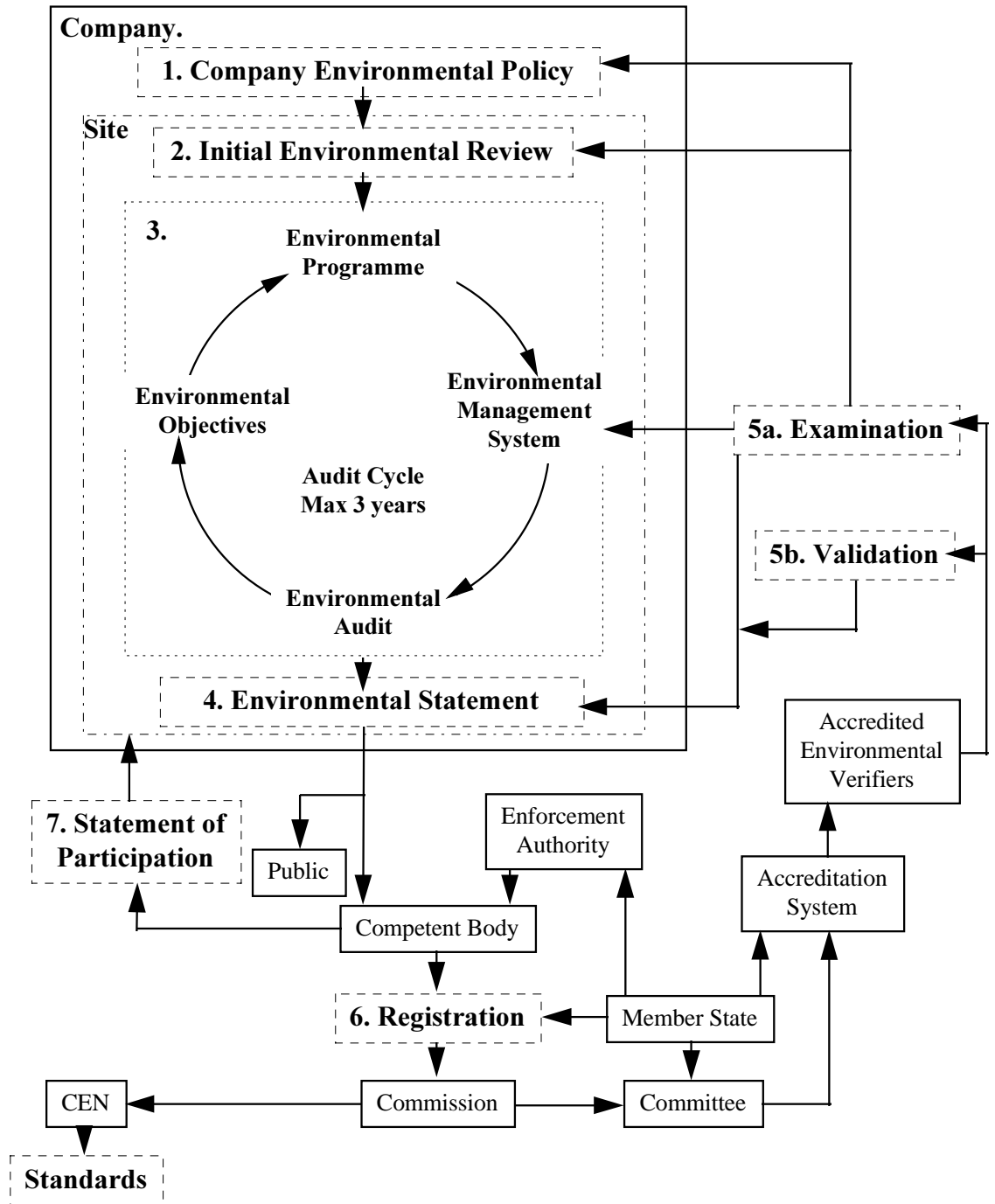
Regulation 1836/93/EEC sets up a voluntary eco-management and audit scheme for participating industrial companies which seeks to reward and promote better environmental performance of industrial activities. The scheme requires participating sites to:

- establish and implement policies, programmes and management systems
- audit the performance of their site; and,
- provide environmental performance reports to the public.

It applies to manufacturing, energy and recycling industry sites and may be extended to other sites on an experimental basis. Participants must take the following steps:

- adopt an environmental policy - it should include compliance with regulatory instruments, continued improvement in environmental performance, and the reduction of environmental impacts
- conduct an environmental review of the site
- introduce an environmental programme and environmental management system

An Over View of the Eco-Management and Audit Scheme



- carry out an environmental audit within a maximum cycle of three years;
- prepare a publicly available environmental statement including in particular details of site-based environmental impacts.
- conduct an independent verification of the environmental statement through independent verifiers accredited under the national accreditation systems.

National or international environmental management and audit systems other than the EMAS may be considered as equivalent if they are identified in the *Official Journal of the European Community*.

Implementation considerations

Although regulations may not be transposed into national law, countries do need to take certain administrative steps to give them effect on the date of entry into the European Union:

1. Establish a system for the accreditation and supervision of accredited environmental verifiers. The setting up and direction of the accreditation systems requires the consultation of the parties involved.
2. Send an updated list of accredited environmental verifiers every 6 months to the Commission.
3. Acceding countries may, as an option, apply provisions analogous to the Eco-Management and Audit scheme (ISO 14001 or a national environmental management and audit scheme) prior to joining the European Union.
4. The EMAS Regulation requires Member States to set up competent bodies which are in charge of the registration of sites and of communicating the list of the registered sites to the Commission. The composition of these bodies is required to be such that it guarantees their independence and neutrality.

F.6 Eco-Label

Regulation 880/92/EEC on a EU eco-label award scheme seeks to promote the design, production, marketing and use of products which have reduced environmental impacts during their life cycles. The regulation also seeks to provide consumers with better information on the environmental impact of products. It does not apply to food, drink or pharmaceuticals, dangerous substances under Directives 67/548/EEC or 88/379/EEC, or to products manufactured using processes which are likely to cause significant harm to man or the environment.

Conditions for the awards for each product group are to be determined by a Committee of Member State representatives after a consultation process involving interested groups from industry, commerce, consumer and environmental organisations. Product group eco-label criteria last three years and are determined according to life cycle assessments of product groups based on the maintenance of a high level of environmental protection.

So far, eco-label criteria have been determined for: Dishwashers, Soil improvers, Toilet paper, Paper kitchen rolls, Laundry detergents, Single-ended light bulbs, Indoor paints and varnishes, Bed-linen and T-shirts, Double-ended light bulbs, Washing machines, Copying paper, and Refrigerators.

Implementation considerations

1. Although regulations may not be transposed into national law, Member States will need to designate a competent body, whose composition is to guarantee its independence and neutrality, to receive the eco-label applications, assess the environmental performance of the product in relation to specified criteria, and decide on the award of the eco-label.
2. Ensure that consumers and undertakings are informed about the eco-label award scheme.
3. In order for the eco-label scheme to be successful, it needs to be known by the consumer and supported by industry or retailers. Consultation and information campaigns in support of the scheme are almost a prerequisite for its success.

G. CHEMICALS AND GENETICALLY MODIFIED ORGANISMS

The most important area of EU chemicals control legislation is that concerning the **testing and notification** of chemicals and preparations. The others are those concerning **genetically modified organisms (GMOs)**, **animal experimentation**, **good laboratory practices**, and directives or regulations controlling **products**.

The directives on the Contained Use of Genetically Modified Organisms and on Deliberate Release establish a system controlling the use of genetically modified organisms. They were modelled on the chemicals notification directives.

The Animal Experiments Directive 86/609/EEC establishes minimum humane treatment standards for animals which are used for mandatory testing under the EU chemicals and preparations directives.

The Directive on Harmonisation of Good Laboratory Practice 87/18/EEC and its related Directive on Inspection and Verification of Good Laboratory Practice 88/320/EEC implement the relevant OECD Council acts aimed at ensuring that the OECD member countries recognise the validity of the data produced through the testing of chemicals according to these harmonised standards for good laboratory practice.

Finally, the Asbestos Directive 87/217/EEC provides an integrated set of controls on the release of asbestos into air water and land.

G.1 Chemical Testing and Notification

Classification, packaging and labelling of dangerous substances

Council Directive 67/548/EEC on the testing, classification, packaging and labelling of chemicals which are dangerous to man and the environment. A pre-market testing and notification system for new chemicals placed on the Community market was introduced in 1979.

The directive distinguishes between 'new' and 'existing' chemicals. Existing chemicals are those which were placed on the Community market before 18 September 1981 and are listed in the European Inventory of Existing Commercial Chemical Substances (EINECS). 'New' chemical substances are those which are not in EINECS.

A producer or importer who places a new chemical substance on the market for the first time in the European Community must submit a notification dossier about the chemical to a national competent authority at least 45 days in advance.. This 'base set' of information is intended to be a screen for health and environmental hazards. Existing chemicals are exempt from notification. They have to be classified on the basis of their intrinsic properties by the competent authorities and provisionally by the manufacturers, distributors and importers.

There is also a reduced notification procedure for substances placed on the market in quantities of less than one tonne per annum per manufacturer.

CHEMICALS AND GENETICALLY MODIFIED ORGANISMS

Testing	Transport	Market Notification	Products
<p>Animal Testing (86/609/EEC)</p> <p>Good Laboratory Practice, GLP Inspection (87/18/EEC)</p> <p>Contained Use of Genetically Modified Organisms (90/219/EEC)</p> <p>Deliberate release of Genetically Modified Organisms (90/220/EEC)</p>	<p>Dangerous Goods by Road (94/55/EC)</p>	<p>Classification, Packaging and Labelling of Dangerous Substances (67/548/EEC)</p> <p>Dangerous Preparations (88/337/EEC)</p> <p>Deliberate Release of Genetically Modified Organisms (92/220/EEC)</p>	<p>Classification, Packaging, Labelling of Dangerous Substances (67/548/EEC)</p> <p>Dangerous Preparations (88/337/EEC)</p> <p>Deliberate Release of Genetically Modified Organisms (90/220/EEC)</p> <p>Restrictions on Marketing and Use (76/769/EEC)</p> <p>Asbestos (87/217/EEC)</p> <p>Detergents (73/404/EEC)</p> <p>Risk Assessment of Existing Substances (EC/1488/94)</p> <p>Import & Export of Dangerous Chemicals (EEC/2455/92)</p> <p>Ozone-Depleting Substances (EC/3093/94)</p>

The directive lists 14 categories for the classification of dangerous substances according to their physico-chemical or toxicological properties. It also specifies symbols and indications of danger for labelling as well as standard risk phrases and safety phrases. The directive also contains basic requirements for the packaging of dangerous substances.

All of the chemicals which the Community has classified as hazardous under the Directive are listed in Annex I, which is updated regularly. This annex defines the hazard symbol, risk and safety phrases to be put on the label.

Implementation considerations

1. Implementation requires the development of efficient administrative and technical structures capable of managing and assessing the flow of information linked to the placing on the market of a new chemical substances. Strong international co-operation is also necessary to ensure that all the elements for the evaluation of such substances within the short time frame allowed are collected and available in order to fulfil the control role national authorities are charged with.
2. The competent authorities should develop the necessary data bases to be consulted by manufacturers and importers to avoid unnecessary duplication of testing especially for what involves animal testing.
3. Effective custom and internal controls together with penalties will be needed to avoid illegal import and marketing of non-notified chemicals from third countries. For the same reason, information campaigns focused to importers and manufacturers would be useful to rise the level of compliance with the detailed technical requirements linked to chemical notification.
4. Permanent fora with the chemical industry sector would have to be created to allow effective exchange of information to take place and for the preparation of proposals for classification of existing substances.
5. For new substances: Comparable lists to ELINCS and the list on NLP(no-longer polymer) have to be established.
6. For existing substances: A list comparable to the EINEC-list has to be established. Data on existing substances should be compared with the EINEC-list and the Annex I of the Directive 67/548/EEC.

Classification, labelling and packaging of dangerous preparations

Council Directive 88/379/EEC adapts and extends the procedures and standards for the classification and labelling of dangerous chemicals under Directive 67/548/EEC to dangerous preparations. A preparation is a mixture of two or more chemical substances.

It applies to preparations which are placed on the market in the EU and which contain at least one substance classified as dangerous or which are regarded as dangerous. Preparations must be classified according to the greatest degree of hazard identified.

It does not apply to medicinal or veterinary products, cosmetic products, mixtures of substances in the form of wastes, and pesticides, which are covered by other Community legislation.

Packaging of dangerous preparations must meet the same criteria as chemicals with respect to labels, strength, leak-tightness and fastening systems.

The Member States may on the basis of detailed information provisionally prohibit or limit the sale of a preparation which, although satisfying the directive, constitutes a hazard by reason of its classification, packaging or labelling.

Implementation considerations

1. The same remarks made for dangerous substances apply to dangerous preparations.

Existing Substances

Regulation 793/93 on the evaluation and control of existing substances establishes the obligation for manufacturers and importers to deliver data on substances produced or imported above certain quantities. On the basis of the information submitted and on the basis on the national lists of priority substances, the Commission draws up list of priority substances for which risk assessment will be carried out. The principles for risk assessment are defined by Regulation EEC 1488/94 supported by a detailed Technical Guidance Document. The Commission may propose risk reduction measures.

Implementation considerations

- 1 Member States must evaluate the risk of dangerous substances based on the information provided by manufacturers and importers.
- 2 They must introduce appropriate legal and administrative sanctions to deal with non-compliance by industries and importers.

Animal Experiments

Directive 86/609/EEC on the protection of animals used for experimental and other scientific purposes aims to establish minimum standards for the use of animals for experimental or scientific purposes relating to fundamental and applied research, drugs, foodstuffs and other substances or products, and to the protection of the environment. Endangered species may only be used for research aimed at the preservation of the species or essential biomedical purposes where the species is the only one suitable.

It lays down general and specific requirements for housing, monitoring, avoidance of pain or stress, the elimination of discovered defects or suffering, and the humane killing of animals at the end of the experiment.

An experiment can only be performed if no other scientifically satisfactory method of obtaining the result sought, not entailing the use of animal, is available.

Breeding and user establishments must be approved, registered and maintain detailed records. Certain animals, including mice, rats, dogs, cats and non-human primates, must be bred animals unless prior exemption is obtained to use wild animals. In order to avoid duplication of testing, the Member States are encouraged to recognise the validity of data generated by experiments carried out in other Member States.

All experiments have to be notified in advance to the national authority. Where animal will, or may, be subject to severe and prolonged pain, the experiment has to be specifically authorised. On the basis of requests for authorisation and notifications the Member States are required to collect statistical information on the use of animals in experiments.

The research into the development and validation of alternative techniques involving fewer animals or which entail less painful procedures should be encouraged.

Implementation considerations

1. The national competent authority must establish the requirements for providing authorisation to the institutes/companies and persons carrying out experiments on animals and on breeding companies.
2. Specific bodies will have to be given responsibility for issuing authorisations and carrying out periodic controls both on the experiments themselves and on the establishments.
3. The national competent authority should establish a network of information with authorities in other countries in order to avoid duplication of the experiments.
4. The national competent authority must establish a data collection system to meet the requirements for statistical reporting. A summary of the information collected will need to be provided to the European Commission periodically.

Good Laboratory Practice and Inspection and Verification of Good Laboratory Practice

The purpose of these two directives is to avoid the duplication of mandatory chemicals testing in the OECD countries by providing harmonised test methodologies which will support the mutual acceptance of test data by the OECD member countries.

Directive 87/18/EC on the harmonisation of laws, regulations and administrative provisions relating to the application of the principles of good laboratory practice and the verification of their applications for tests on chemical substances requires that laboratories carrying out tests on chemical products under Directive 67/548/EEC comply with the principles of good laboratory practice (GLP) specified in Annex 2 to the Decision of 12 May 1981 of the Council of the OECD on the mutual acceptance of data for the evaluation of chemical products.

Directive 88/320/EEC on the inspection and verification of Good Laboratory Practice (GLP) establishes standards and procedures for the inspection and verification of Good Laboratory Practice (GLP)

Laboratories must certify that the tests have been carried out in compliance when submitting the results. The Member States must verify compliance with these principles, in particular by carrying out inspections and study *audits* in accordance with OECD recommendations.

The Member States must appoint authorities responsible for the inspection of laboratories and the auditing of studies to assess their compliance with GLP.

Implementation considerations

1. The countries have to ensure that laboratories carrying out tests in accordance with Directive 67/548/EEC on the classification, packaging and labelling of chemical substances comply with the principles of good laboratory practice.
2. A system of verification of compliance with the principles has to be set up. This system of inspections should include in particular inspections and study *audits* in accordance with OECD recommendations.

G.2 Genetically Modified Organisms

Contained Use

The purpose of Directive 90/219/EEC on the contained use of genetically modified micro-organisms (GMMs) is to provide common rules throughout the EU for the use of GMMs both in research laboratories and industrial facilities and to provide appropriate measures to protect human health and the environment from any risks arising from activities using GMMs.

The Directive provides for an appropriate system of risk management. The use of GMMs must be notified to the competent authorities. The micro-organisms and the activities in which they are used are each classified in two categories, according to their potential risk, and containment and control measures, including the procedures for record keeping and notification of the competent authorities, are laid down and must be applied accordingly.

Effective risk management means that a careful risk assessment of contained uses must be made, the appropriate level of containment must be exercised and suitable preventive measures must be taken.

The Directive also lays down requirements, where necessary, for emergency planning and response in the event of an accident. Information on safety measures in the case of an accident must be supplied to persons liable to be affected. If an accident occurs, the user must give the information to the national competent authority. Each Member State where an accident happens must ensure that the necessary emergency measures are taken; immediately alert other Member States which might be affected; inform the European Commission; and analyse the accident and recommend actions to avoid similar accidents in the future.

Implementation considerations

1. Countries must designate competent authorities to receive the notifications.
2. These competent authorities have to organise inspections and other control measures.
3. They must examine the conformity of the notifications received with the requirements of the directive.
4. As this is a rapidly developing field, considerable attention should be given to training and to maintaining the scientific quality of the competent authorities.

Deliberate Release of GMOs

Council Directive 90/220/EEC covers the deliberate release of genetically modified organisms (GMOs) into the environment for research and development purposes (Part B releases) and the placing on the market of products (Part C releases) which contain or consist of GMOs, with some exceptions defined in Annex I B.

The Directive follows a preventive approach of prior assessment and approval. Its main elements can be summarised as follows :

- An environmental risk assessment must always be carried out before any experimental or commercial release of GMOs into the environment, taking into account the parameters outlined in Annex II of the Directive.
- No releases may be carried out without the consent of the competent authorities (CAs).
- An approval procedure by national CAs in the country of release is foreseen for experimental releases, lasting a maximum of 90 days.
- A Community approval procedure is foreseen for commercial releases.

The Directive has clear provisions on the protection of confidential information. However, some information may not be kept confidential and is therefore the minimum information which must be accessible to the public. This includes :

- Description of the GMO;
- Name and address of the notifier;
- Purpose of the release;
- Location of the release;
- Methods and plans for monitoring the GMOs and for emergency response.

Implementation considerations

1. Countries have to designate competent authorities to receive notifications and organise inspections and other control measures. Close collaboration with industry is necessary to ensure the availability of information. Scientific and technical expertise must be available to the CA.
2. Effective penalties, such as extensive product liability would be advisable to minimise risk of insufficient testing and safety measures for the release of GMOs.
3. Specific strategies for the immediate withdrawal from the market of potentially dangerous GMOs and the control of their release should be foreseen.
4. International collaboration would be useful in order to exchange data and experience.

G.3 Product Controls

Asbestos

Directive 87/217/EEC on the prevention and reduction of environmental pollution by asbestos is the first 'substance oriented' directive which integrates controls on emissions to air, water and land. It is intended to supplement restrictions on asbestos laid down by Directive 76/769/EEC on marketing and use, and by other directives dealing with worker protection, discharges to air, and waste.

A general duty is placed on the Member States to ensure that asbestos emissions into the air, into water, and solid asbestos wastes are, as far as reasonably practicable, prevented by means of reductions at the source. A limit value for air emissions is set.

Liquid effluents from asbestos cement and paper and board manufacture must be recycled. If recycling from the manufacture of asbestos cement is not 'economically feasible', the asbestos content of the wastes must not exceed 30 g/m³.

Work with asbestos products and the demolition of buildings may not cause significant environmental pollution by asbestos fibres or dust. In the course of transport and landfill, no asbestos fibres or dust are to be released and no liquids containing asbestos fibres are to be spilled. Waste is to be treated, packaged or covered so that no release from landfill will occur.

Monitoring methods for discharges to air and water are laid down.

Implementation considerations

1. Since the adoption of this directive most Member States have forbidden the abstraction and use of asbestos. Many of the requirements are now outdated and far less restrictive than existing national measures. As the directive imposes minimum requirements, stricter measures might be considered on the basis of accepted scientific evidence, when implementing this Directive.
2. The issue of demolition or removal of asbestos containing structures will require major capital investment. A strategy for the assessment of the more urgent intervention must be developed. Risk assessment procedures specific to this issue will have to be developed together with safe remediation procedure.
3. The waste management plans must consider also the need for the creation of safe disposal sites for asbestos containing waste.

Detergents

Council Directive 73/404/EEC prohibits the placing on the market and use of detergents where the average level of biodegradability of the surfactants contained therein is less than 90 percent for four categories: anionic, cationic, non-ionic and ampholytic. These surfactants must not be harmful to human or animal health under normal conditions of use.

The test methods for determining compliance with the directive are provided in Council Directive 73/405/EEC on the testing the biodegradability of non-ionic surfactants, which lays down three methods of testing the biodegradability of these surfactants. The Member States must notify each other and the Commission of the laboratories authorised to carry out these tests.

Implementation considerations

1. The countries would have to establish a system for assessing the toxicity and biodegradability of the detergents placed on the national market.
2. A network of authorised testing laboratory must be created and their activity controlled to ensure reliability of data. The authorities have to keep a registry of these laboratories and notify the European Commission their authorisation.
3. The competent authority must notify to the other competent authorities and the European Commission on all restrictions on national marketing of detergents not in compliance with the directive.

Restrictions on the marketing and use of certain dangerous substances and preparations

Council Directive 76/769/EEC created a framework and a simplified legislative procedure through which the EU may ban or restrict dangerous chemicals or preparations by adding the substances and controls to an annex to the directive.

Member States must take all necessary measures to ensure that these dangerous substances and preparations are only placed on the market or used subject to the conditions specified. These restrictions do not apply to marketing or use for the purposes of research and development.

The directive does not apply to transport, exports to non-EC member countries or substances in transit and subject to customs inspection.

Implementation considerations

1. The controls on substances and products under the directive must be transposed into national law.
2. A timetable would have to be established for the withdrawal from the market of the restricted products.

Export and Import of Dangerous Chemicals

Council Regulation (EEC) No 2455/92 concerning the export and import of certain dangerous chemicals establishes a common system of notification and information for exports to third countries of chemicals which are banned or severely restricted in the Community on account of their effects on human health and the environment. The Regulation also implements the UNEP/FAO Prior Informed Consent (PIC) procedure and makes it mandatory for EU Member States.

Implementation considerations

- 1 Countries shall designate one or more authorities responsible for the operation of the Regulation and contact with exporters

- 2 The designated authority(ies) shall ensure that exporters comply with the export notification and PIC procedures
- 3 Countries shall take appropriate legal or administrative action to enforce the Regulation.
- 4 Exporters of dangerous chemicals shall package and label their products in the same way as if they were to be marked in the EU
- 5 Countries shall co-operate closely with the Commission in evaluating the risks posed by the chemicals included in the PIC procedure, in order to define EU decisions regarding the import of those chemicals into the EU
- 6 Countries shall inform the Commission of notifications received regarding imports into the EU of chemicals for which the manufacture, use, handling, consumption, transport and/or sale are prohibited or restricted in the exporting country.

Ozone Depleting Substances

Regulation EC/3093/94 on substances that deplete the ozone layer implements the Montreal Protocol to the Vienna Convention for the protection of the ozone layer. It sets strict standards for CFCs, HCFCs, and methyl bromide and lays down rules for the importation from third countries of the controlled substances, and for the recovery, destruction and recycling. It accelerates the phasing out of use of ozone-depleting substances beyond what had been originally agreed at international level. Standards, stricter than those set in the Montreal Protocol are set for CFCs, HCFCs, and methyl bromide. Controls are placed on production, imports, exports, supply, use and recovery of controlled substances listed in Annex I. The use of HCFCs is prohibited except for certain named uses. The regulation also introduces an import license system delivered by the Commission.

Implementation considerations

1. Countries shall design the competent authority responsible for the implementation of the regulation.
- 1 Each producer, importer or exporter is to report information on produced, imported and exported quantities annually to the Commission and to the competent authority the country.
- 2 A programme could be drawn up by the competent authority for the information of the parties concerned by the regulation.
1. As the regulation contains different or stricter obligations than the Montreal Protocol, the implementation of the regulation will impose new obligations to new accessing countries, such as stricter standards and controls, different phasing out and information reports to send to the Commission.

G.4 Transport of Dangerous Goods by Road

Transport of dangerous goods by road is governed by the European Agreement concerning the international carriage of dangerous goods by road (ADR). Part II of the Agreement distinguishes nine classes of substances and the special provisions for the various classes.

Council Directive 94/55/EC on the transport of dangerous goods by road, made the requirements of the Convention applicable not only to international transports within the EU, but to any transport of dangerous goods by road within the EU. Member States had to transpose the requirements of this Directive into national law by 1 January 1997.

Implementation considerations

1. Countries which have already ratified ADR convention and implemented its requirements the transposition of the EU directive may need to make adjustments in the administrative and control structure already in place.
2. Additional controls would have to be put in place to cover transport of dangerous goods within the national territory.
3. National authorities would have to decide if pre-existing national safety rules may be accepted in the framework of the directive.

H. NOISE FROM VEHICLES AND MACHINERY

Existing noise control legislation can be divided into four categories. The noise emissions from **motor vehicles** are covered by two directives introducing sound level limits. Three directives limit noise emissions from **aeroplanes** by reference to the Convention on international Civil Aviation. Noise emission from **household appliances** has been the object of a framework directive on household appliances. The last sector, **construction equipment**, is based in the EEC conformity assessment procedure framework directive which led to the adoption of seven daughter directives on particular types of equipment.

H.1 Motor Vehicles, Motorcycles

Motor Vehicles

Directive 70/157/EEC introduces limits on the sound levels of noise for road vehicle and gives requirements for measuring sound levels and exhaust systems and silencers. Several amendments, the latest by Directive 96/20/EC, have reduced these permissible sound levels. Limit values for eight types of passenger and goods vehicles range from 74 dB(A) to 80 dB(A). It applies a system of optional harmonisation to the approval of motor vehicles and exhaust system. The Member States may not refuse to grant EEC or national type-approval to vehicles which meet the requirements of the directive.

Motorcycles

Directive 78/1015/EEC on motorcycles establishes limits for the permissible sound level of motorcycles and requirements for exhaust or intake silencer. It introduces a harmonised testing procedure before issuance of the sound level measurement certificate. A system of optional harmonisation is applied to the checks carried out by the Member States which may not refuse to grant EEC or national type-approvals, although they are not required to adopt these standards for domestic producers. Limit values are given for three categories of motorcycles and range from 75 dB(A) to 80 dB(A). Member are required to respect the validity of each other's certificates.

Implementation considerations

1. Manufacturing plants may need to be adapted to apply the limit values and measurements required to their products.
2. The existing type-approvals needs to be reviewed to include the changes implied by the directive for the internal market.

Motor Vehicle Noise Emissions Directive – Implementation Considerations

National Legislative Framework

- Compare directive requirements to existing national laws.
- Identify legislative gaps.
- Implement changes to motor vehicles legislation and/or national environmental protection legislation governing noise emissions.

Competent Authorities (CAs)

- CAs must have administrative systems to enforce noise emissions standards on a national basis to road vehicles. CAs must also implement prescribed noise measuring methods.
- Local CAs could assume responsibility for inspection and monitoring vehicles within their jurisdiction. This role should include the power to ban vehicles which do not comply with noise emissions standards.

Legal Checkpoints

- Implementation of a national type-approval system governing both imported and domestically manufactured vehicles.
- Legal measures to ensure implementation of test procedures, including spot checks and fines.
- Penalties for breaches of maximum emission standards as well as for import/production of vehicles which do not meet standards.
- Prohibit sale or use of non-EEC type approved vehicles.

Compliance Considerations

- Assess whether new vehicles proposed for introduction into country market have received EU certification under Directive EEC/92/97.
- Consider use of fine system for violations of use prohibitions.

Stakeholders

- Ensure discussion with vehicle industry experts on compliance methods and incentives for meeting noise reduction targets.
- CAs should meet with industry, public and consumer groups on vehicle noise reduction planning, including measures to introduce quiet heavy vehicle technologies.
- Ensure regular public communications about vehicle noise reduction measures.

Financial Considerations

- Government to provide CA and administration.
- Industry to meet costs of compliance.
- Government and industry co-operation in development of fiscal incentives to reward earlier introduction of vehicles which meet new noise emission limits.

NOISE CONTROL

VEHICLES

Motor Vehicles (70/157/EEC)
Motorcycles (78/1015/EEC)

MACHINES

Household Appliance Framework
Directive (88/594/EEC)

AEROPLANES

Subsonic Aeroplanes (80/51/EEC)
Jet Aeroplanes (89/629/EEC)
Limitation of Aeroplane Operation
(92/14/EEC)

CONSTRUCTION

**EEC type-examination
framework**
(84/532/EEC)

Compressors (84/533/EEC)
Tower Cranes (84/534/EEC)

Welding Generators
(84/535/EEC)

Power Generators (85/536/EEC)
Concrete Breakers (85/537/EEC)

Lawnmowers (85/538/EEC)

Hydraulic Excavators, etc.
(86/662/EEC)

3. The countries should decide whether to apply a two-step legislation (standards for domestic market different from the EU internal market) or harmonise national standards with EU ones.
4. Countries should organise compliance monitoring, and carry out spot checks and measurement controls.

H.2 Aeroplanes

This category comprises four directives. The first laid down limits on noise emissions for aeroplanes registered in the territory of the Member States. The second one applied these limits to aircraft from third countries. The third stopped older noisy aircraft from being added to Member States registers. The fourth set stricter rules on the operation of aeroplanes by submitting to international noise standards all aeroplanes operating on airports situated on the territory of the EU.

Civil Subsonic Aircraft

Directive 80/51/EEC lays down limits on noise emissions from subsonic aeroplanes based on standards specified by the International Civil Aviation Organisation. The goal is to reduce aeroplane noise, taking into account environmental factors, technical feasibility and economic consequences. It defines the contents of the documents attesting to noise certification and requires the Member States to respect the validity of each other's documents. Exemptions may be granted for specific types of aircraft. Directive 83/206/EEC applied directive 80/51/EEC to third countries.

Civil Subsonic Jet Aeroplanes

Directive 89/629/EEC lays down stricter rules to limit noise emissions from certain subsonic jet aeroplanes registered in EU territory. As under Directive 80/51/EEC, these rules are incorporated by reference from the Convention on international Civil Aviation. It prohibits the addition of certain types of noisy aircraft in the civil air registers of Member States.. Some exemptions are allowed, provided the other Member States and the Commission are informed.

Limitation of the operation of aeroplanes

Directive 92/14/EEC imposes restrictions on the use of certain aeroplanes so as to reduce noise and limit the operation at airports in the EU of aeroplanes which do not comply with the standards set in Annex 16 to the Convention on international Civil Aviation. The restrictions apply to civil aeroplanes of 34 000 kg and a capacity of 19 seats or more.

Implementation considerations

1. Countries must designate competent authorities to be responsible for controlling the application of international noise standards.
2. Countries should adopt strict enforcement measures and penalties against aeroplanes which do not comply with the directives.

H.3 Noise measurement methods: Construction Plant and Equipment

Directive 79/113/EEC on the determination of the noise emission of construction plant and equipment introduces a test method for determining the noise emissions of construction plant and equipment, that is, machinery, appliances, plant and installations or components thereof which are used to perform work on civil engineering and building sites. Equipment primarily intended for the transport of goods or persons and agricultural and forestry tractors are not included. The tests procedures applying to construction plants must be applied to determine the maximum sound emission levels of equipment for which detailed requirements concerning sound levels are laid down in separate directives.

Implementation considerations

1. The directive's test method shall replace the existing one, if any.
2. Technical requirements should be given to specialised laboratories or institutions which would be responsible for carrying out the control functions.

H.4 Permissible noise emission: Construction Plant and Equipment

Permissible sound power levels are laid down within the framework of directive 84/532/EEC on the EEC type-examination for construction plant and equipment, with regard to harmonised requirements for these types of equipment, in seven separate directives, each of them concerning a particular equipment. All the seven 'daughter' directives require that the products covered must be labelled with a mark indicating the noise levels guaranteed by the manufacturer, and contain annexes which define a method of measuring airborne noise and a spot check procedure for checking the conformity of production models with the type examined. Member States are not allowed to keep equipment which meet these requirements out of their markets, but are allowed to regulate the use of the equipment in areas they consider sensitive (e.g. near hospitals).

EEC type-examination certificates are valid for a period of five years and may be renewed.

Compressors

Directive 84/533/EEC lays down noise limits for the environment and related requirements for the issuance of an EEC type-examination certificate for compressors.

Tower Cranes

Directive 84/534/EEC lays down noise limits for the environment, noise limits at the operator's position, and related requirements for the issuance of an EEC type-examination certificate for tower cranes. It lays down limits for the lifting mechanism, the energy generator and the assembly comprising the lifting mechanism and energy generator. Member States may limit the noise level at the work place.

Welding Generators

Directive 84/535/EEC lays down noise limits for the environment and related requirements for the issuance of an EEC type-examination certificate for welding generators.

Power Generators

Directive 84/536/EEC lays down noise limits and related requirements for the issuance of an EEC type-examination certificate for power generators.

Concrete breakers

Directive 84/537/EEC lays down noise limits for the environment and related requirements for the issuance of an EEC type-examination certificate for concrete breakers. The Member States may limit the noise level at the work place.

Lawnmowers

Directive 84/538/EEC defines noise limit values for the environment, noise limits at the operator's position, and measurement methods for noise from certain lawnmowers.

Hydraulic Excavators

Directive 86/662/EEC lays down noise limits and related requirements for the issuance of an EEC type-examination certificate for earth-moving machines used on civil-engineering and building sites. Additionally it requires labelling of the products with the noise level at the operator's position. The Member States may limit the noise level at the work place.

Implementation considerations

1. A general programme could be drawn up for the implementation of the seven directives.
2. In order to apply the EU method of measuring airborne noise, manufacturing plants will need to obtain appropriate technical equipment.
3. A monitoring programme should be drawn up
4. A system of competent authorities ("appointed bodies") must be set up. The competent authorities must be appropriately equipped and trained.

H.5 Household Appliances

Directive 86/594/EEC is a framework directive on airborne noise emitted by household appliances. It provides consumers and users with standards and procedures governing the provision of accurate information about the noise levels of household appliances by means of clear labels combined with other mandatory consumer information such as energy consumption levels. It intends to avoid the proliferation of national labels and to encourage manufacturers and importers to produce less noisy appliances. It provides general principle regarding public information about these noise levels.

Implementation considerations

1. Countries must follow the general guidelines for test and statistical methods set up by the directive, which means that laboratories in charge of the tests must have appropriate equipment and training.

2. Countries should decide whether they will publish of information on airborne noise or not. If they do not, they must ensure that the manufacturer or importer publishes it.
3. The national competent authority must define a general label format.

I. NUCLEAR SAFETY AND RADIATION PROTECTION

The European Union has adopted, mostly on the basis of article 31 of the Euratom Treaty, a series of directives and regulations setting standards for the health protection of workers and of the population against the dangers arising from ionizing radiation.

This legislation is based on a framework directive: Directive 96/29/Euratom, called the “**Basic Safety Standards**” Directive. This basic piece of legislation is supplemented by more specific legal instruments: The Directive 97/43/EURATOM on **Radiation Protection related to medical exposures** lays down basic standards mainly for the protection of patients, undergoing medical examinations or treatment, from radiation.

The **Early Exchange of Information in Case of a Radiological Emergency** sets up a European Union notification system to deal with nuclear emergencies. It calls upon Member States to provide for the timely dissemination of information concerning the emergency. The accompanying **Public Information** Directive requires in normal circumstances the Member States to provide prior information to the public likely to be affected; In emergency situation the public actually affected has to receive immediate information.

The **Radiation Protection of Outside Workers** Directive deals with the protection of outside workers which are not on-site employees.

The **Radioactive Waste Shipment** Directive and **Radioactive Substances Shipment** Regulation are establishing a strict surveillance system on the movements of such radiation sources. **Contaminated Foodstuffs** Regulations have been also adopted setting up maximum permitted levels of radioactive contamination for the placing into the market of foodstuffs and feedingstuff in case of a nuclear accident.

I.1 Basic Safety Standards

Directive 96/29/Euratom (replacing Directive 80/836/Euratom) is a framework directive laying down basic safety standards for the health protection of workers and general public against the dangers of ionising radiation. Health and safety measures are prescribed for justified practices involving artificial radiation sources. In general, these practices must be reported or receive prior authorisation from a competent authority in the implementing country. Among the requirements are the dose limits both for exposed workers and the population. In addition the dose received must be as low as reasonably achievable (optimisation principle). Main principles for the operational protection of workers are:

- prior evaluation of risk and optimisation of protection
- classification of workplaces
- classification of workers
- exposure monitoring
- medical surveillance

Work activities which lead to a significant increase in the exposure to natural radiation are subject to a regime similar to the practices regime. Measures are prescribed in the event of a radiological emergency or of lasting radiological exposure.

Implementation consideration

1. Competent authorities must ensure that undertakings involved in practices and work activities related to ionising radiation apply standardised health and safety procedures for assessing and limiting exposure on site. These must include training programmes , working instructions, arrangements for workplaces, presence of a radiation protection expert or unit.
2. Appropriate licensing, monitoring ,inspection procedures and intervention plans for radiological emergencies must be developed and applied by the competent authorities.

Basic Safety Standards Directive - Implementation Considerations

National Legislative Framework

- Compare Directive requirements to existing national laws.
- Identify Legislative Gaps.
- Implement appropriate changes to Radioactive Substances legislation, Workers Health and Safety legislation and Public Health legislation *and emergency planning legislation.*

Competent Authorities (CAs)

- CAs must have administrative systems and scientific know how with regard to coping with the dangers of ionising radiation and enforcing maximum dose limit requirements.
- The Central Authority must develop and administer model practices for dealing with the limitation of exposure, assessing exposure, medical surveillance, and site operational protection.
- Local CAs could assume responsibility for inspection and monitoring procedures for sites within their jurisdiction.

Legal Checkpoints

- Legal measures to ensure adequate exposure data records for workers.
- *Application of the 'optimisation' principle.*
- Penalties for breaches of exposure beyond maximum permissible levels.

Operational Protection Principles

- Take measures for reducing exposure
- Provide a sound methodology for evaluating exposure
- Set up medical surveillance activities for exposed workers.
- Implement country tasks for protecting exposed workers.
- Maintain operational protection for students and apprentices
- *Establish and check national and local emergency plans.*

Stakeholders

- Ensure that prior to the development of the regime, there is stakeholder discussion on detection and elimination of exposure risks to the public.
- CAs should hold sessions with representatives of workers collectives in affected sectors to inform and discuss operational measures for protection of workers. Site operators should be involved here.
- Ensure regular public communications about public safety measures including those related to any actual exposure incidents.

Financial Considerations

- Government to contribute CA and administrative support, scientific advice with respect to operational measures and public safety procedures.
- Site operators to pay for operational procedures to protect workers and for achieving and maintaining an optimal level of protection of the environment and of the population.

I.2 Shipments of radioactive waste

This Directive applies to shipments between Member States and into or out of the Community.

Competent authorities must be appointed to notify the authorities in the countries of transit and the country of destination.

Implementation considerations

1. Countries must develop the administrative apparatus, documentation and monitoring procedures for overseeing radioactive waste movements. This is to include a system for authorising radioactive waste movements as well as notifying all concerned States.

I.3 Shipments of radioactive substances

Regulation 93/1493/Euratom sets up an administrative regime controlling shipments of sealed or unsealed sources across national borders within the European Union. The procedures described in the Regulation do not apply to radioactive waste and nuclear fissile material.

Implementation considerations

1. Countries must develop the administrative apparatus, documentation and monitoring procedures for overseeing radioactive substances movements. This is to include a system for authorising radioactive substance movements and an obligation of record for the undertakings who carried out shipments.

I.4 Imports of agricultural products following the Chernobyl Accident

Regulation 90/737/EEC establishes conditions governing imports of agricultural products originating in third countries following the Chernobyl nuclear accident. It prescribes maximum permissible levels of radioactive contamination for a limited number of products.

Implementation considerations

1. Countries must develop administrative, monitoring and enforcement procedures for ensuring compliance with the maximum permissible levels prescribed in the Regulation.

2. Competent authorities for radiation protection should co-ordinate their actions with the ministries responsible for trade and agriculture. The affected economic sectors should be required to be equipped with measurements instrumentation.

I.5 Contaminated foodstuffs in case of a nuclear accident

Regulation 87/3954/Euratom provides a procedure for laying down maximum permitted levels of radioactive contamination for foodstuffs and feedingstuffs which may be placed on the market following a nuclear accident.

Implementation considerations.

1. Countries should designate competent authorities to develop and implement a programme of monitoring potentially affected foodstuffs and feedingstuffs in order to maintain compliance levels

(see comments under I.4).

I.6 Radiation Protection related to medical exposures

Directive 97/43/EUROATOM replacing Directive 84/466/Euratom is a daughter directive to the Basic Safety Standards Directive 96/29/Euratom. It defines specific health protection rules for medical exposure to ionising radiation. It does not cover the radiation protection of medical staff. The main provisions are: qualification requirements for the medical staff involved, requirements for the use of radiological equipment (acceptance testing, strict surveillance, quality assurance), written protocols for every type of radiological practice, role of medical physics experts.

Implementation considerations

1. An inspection office to monitor that medical exposure are delivered under good radiation protection conditions should be established. Criteria of acceptability for radiological equipment shall be adopted by the competent authorities.

2. Training programmes for medical staff, medical physics experts and inspectors should be established.

I.7 Public Information

According to Directive 98/618/Euratom Member States must provide two kinds of information on radiological emergency so that the population adopts an appropriate behaviour: in a normal situation prior information about emergency response behaviour must be given to the population covered by an emergency plan; Immediate information must be given to the population affected in the event of a radiological emergency.

Implementation considerations

1. Local and national intervention plans for radiological emergencies must include public information measures.

2. Competent authorities need to develop and disseminate prior information concerning health protection measures and actions to be taken in the event of a radiological emergency.

3. Operators of nuclear installations as well as local authorities should be associated in the organisation and circulation of information.

I.8 Radiation Protection of Outside Workers

Directive 90/641/Euratom on the operational protection of outside workers exposed to the risk of ionising radiation during their activities in the controlled areas seeks to ensure that outside workers receive the same level of protection as exposed workers directly employed on the sites by operators of nuclear and radiological installations. An outside worker is a worker employed by an outside undertaking performing activities on the sites under the responsibility of operators.

Exchange of information as defined by the Directive is needed between the outside undertaking and the operator before the starting of any activity. Division of health and safety duties is defined between the outside undertaking and the operator (eg: information and instructions for outside workers) .

The outside worker is required to carry a radiation magnetic card or passbook containing identity and exposure monitoring data (data as defined in Annex I of the Directive).The exposure data is to be updated immediately after any activity. Cross-frontier workers have to carry an individual document.

Implementation considerations

1. Competent authorities should ensure that division of responsibilities is clearly defined and applied between outside undertaking and operators.
2. Individual monitoring magnetic cards or passbooks have to be issued by the competent authorities.

ANNEX I

HOW TO INTERPRET EU ENVIRONMENTAL LEGISLATION

Introduction

All legislation contains standard structures and terms which need to be taken into account if it is to be understood and interpreted correctly. Some of these features are formal (e.g. they allow legislation to be identified) and some are substantive and affect the interpretation of the legislation. However, the structure of all EU legislation contain the same elements:

- Title
- Powers
- Recitals
- Substantive provisions
- Date of commencement

1.1 Title

The title of the legislation has several elements. It indicates the institution that adopted the measure (the Council and the Parliament, by co-decision, or the Council or the Commission ,as the case may be) and the type of the measure (Regulation, Directive or Decision). It gives the measure a reference number, made up of three elements - the year, the sequential number, and the Treaty under which the measure was adopted (in the case of environmental legislation, this will usually be the EC Treaty). The title also identifies the measure by the date on which it was adopted and by a short description of the subject matter of the measure. (In practice, measures are usually identified by their reference number and the page reference of the Official Journal of the European Union in which they are published.)

1.2 Powers

The measure will then state the legal basis for its adoption, and the procedures that were used. This is because it is a principle of EU law that institutions can only act within the powers conferred by the Treaty and after observing the correct procedural requirements. Most environmental legislation is adopted using specific powers given by Article 130s, but older legislation, and current legislation which is considered to concern the conditions of trade between the Member States primarily and environmental matters only incidentally, will be based on Article 100 or 100a instead.

1.3 Recitals

After the statement of the powers relied on (which, in the English language version start with the words 'Having regard to ...') come a number of Recitals (which, in the English text start with the word 'Whereas ...'). These Recitals explain the background to the legislation and the aims and objectives of the legislation. They are, therefore, important to an understanding of the legislation which follows.

The number of Recitals depends on the complexity and length of the legislation in question. However, it should be noted that the style of drafting is to make the entirety of this opening section (i.e. the statement of the powers and the Recitals) into one long sentence. This can add to the difficulty of understanding the text, although each Recital is intended to deal with a separate topic.

1.4 Substantive provisions

The substantive provisions are divided into Articles. Usually the opening provisions define terms used in the legislation, and deal with general obligations and definitions.

It is important that national legislation implementing a directive use the same *definitions* as in the directive. These will keep their specifically European Union meaning after having been incorporated into national law, and national implications of the use of the same terms are not allowed to affect the application of the EU term.

Later Articles deal with specific provisions, and these may be divided into parts to make it easier to follow the meaning of the text. In particular, technical matters (e.g. scientific lists, categories of plants and animals, and lists of values) may be dealt with separately, in Annexes, to make it easier to follow the text.

It is usually the case, whatever form of legislation is used (i.e. Regulation, directive or Decision) to leave the establishment of the necessary administrative provisions and provisions concerning enforcement and penalties to the Member States to decide in accordance with their national law. In other words the relevant provision in the EU legislation may state simply that Member States must take the necessary measures to ensure compliance with the requirements of the EU legislation, without specifying what those measures must be.

1.5 Commencement

In the case of a directive, the measure will end with an Article requiring the Member States to bring into force the laws, regulations and administrative provisions necessary to comply with the directive by a specified date – known as the date of transposition. This Article will usually require the Member States to notify the Commission of the steps taken to implement the directive. Other deadlines for specific actions such as reducing pollution from existing industrial plants or meeting environmental quality standards may be set separately in the articles dealing with those actions. They are known as 'implementation dates'.

1.6 The issue of legislation in multiple languages

One of the difficulties with legislation in the European Union is the fact that it has to operate in 11 official languages (because all the Member States are entitled to receive documents, especially legislation, in their own language).

The Court of Justice has consistently held that individual provisions should be interpreted to achieve the declared aims of the legislation as a whole, and that narrow, literal interpretations should be disregarded if they would conflict with that aim. Thus EU legislation should be read having regard to the context in which the legislation appears, not as an isolated text.

ANNEX 2

THE ENVIRONMENTAL ACQUIS

in force 6 March 1998

This survey of EU environmental legislation in force by 6 March 1998 updates the list in Annex 2 to the 'Guide to Approximation of European Union Environmental Legislation' from July 1997.

Two new sectors: « **J: Climate change** » and « **K: Civil protection** » have been added to the sectors « A-I » found in the Guide.

For easy reference the survey also includes policy documents and international environmental conventions of relevance for the Associated Countries, which were not included in the Guide. These documents are listed in two new chapters: « **P: Policy** » and « **X: International co-operation** »

Pieces of environmental legislation for which other Commission services than DG XI have the principal responsibility are put in square brackets.

A number of Council and Commission *decisions*, which were not included in Annex 2 to the Guide, have been included in this survey. In chapter "I. **Nuclear Safety and Radiation Protection**" a reference to provisions on health and safety in the EURATOM Treaty has also been included.

A. HORIZONTAL

1. Non-White Paper legislation

Directives

- **Environmental impact assessment, 85/337/EEC,**
amended by 97/11/EC
- **Environmental information, 90/313/EEC**
- **Reporting, 91/692/EEC**
 - Decision 94/741/EEC - Questionnaire on waste*
 - Decision 96/511/EC - Questionnaire on air pollution*
 - Decision 97/101/EC - Exchange of information on air quality*
 - Decision 97/622/EC - Questionnaire on waste*

Regulations

- **European Environment Agency, EEC/1210/90**
- **LIFE, EEC/1973/92**
amended by EC/1404/96

2. White Paper legislation

none

B. AIR QUALITY

1. Non-White Paper legislation

Directives

- **Air Quality Framework, 96/62/EC,**
including 3 older directives (to be replaced by new requirements under the framework directive):

SO₂ and particulates, 80/779/EEC,

amended by 89/427/EEC and 91/692/EEC

Lead, 82/884/EEC

amended by 91/692/EEC

Nitrogen oxide, 85/203/EEC,

amended by and 91/692/EEC

- **Tropospheric Ozone Pollution, 92/72/EEC**

Regulations

none

2. White Paper legislation

Directives

- **[Emissions from motor vehicles, 70/220/EEC,**

amended by 74/270/EEC, 77/102/EEC, 78/665/EEC, 83/351/EEC, 88/76/EEC, 88/436/EEC, 89/458/EEC, 89/491/EEC, 91/441/EEC, 93/59/EEC, 94/12/EEC, 96/44/EEC and 96/69/EEC] "Auto-Oil" proposal COM(96) 0163 (COD)

- **[Emissions from diesel engines - soot, 72/306/EEC**
amended by 89/491/EEC and 97/20/EC]
- **[Emissions from diesel engines 88/77/EEC**
amended by 91/542/EEC and 96/1/EEC]
- **[Emissions from motor vehicles - roadworthiness test for emissions, 92/55/EEC]**
- **VOC emissions from storage and transport of petrol, 94/63/EC**
- ***Lead content of petrol, 85/210/EEC***
amended by 87/416/EEC
- ***Sulphur content of liquid fuels, 93/12/EEC***
replacing 75/716/EEC
- **Emissions from non-road mobile machinery, 97/68/EC**

Proposal on the quality of petrol and diesel fuel, COM(96) 0164 (COD) - "Auto-Oil".

** The proposed directive on the quality of petrol and diesel fuel, COM(96) 0164 (COD) will replace 85/210/EEC and the limit values for sulphur content in diesel fuel for road vehicles found in 93/12/EEC.*

Regulations

none

C. WASTE MANAGEMENT

1. Non-White Paper legislation

Directives

- **Waste from the titanium dioxide industry, 78/176/EEC**
amended by 83/23/EEC and 91/692/EEC,
related directives:
Procedures for the surveillance of titanium dioxide industry,
82/883/EEC
Harmonisation of reduction programmes, 92/112/EEC
- **Municipal waste incineration for new installations, 89/369/EEC** ,
Municipal waste incineration, existing installations 89/429/EEC
- **Hazardous waste incineration, 94/67/EEC**
Decision 96/302/EC,
Decision 97/283/EC

Proposal for a directive on Landfill of waste, (COM(97)105)-final

Regulations

none

2. White Paper legislation

Directives

- **Disposal of waste oils, 75/439/EEC**
amended by 87/101/EEC and 91/692/EEC
- **Waste Framework directive 75/442/EEC**
amended by 91/156/EEC and 91/692/EEC
Decision 76/431/EEC
Decision 94/3/EC
Decision 96/350/EC
- **Disposal of PCBs and PCTs 96/59/EC**
- **Hazardous waste, 91/689/EEC**
amended by 94/31/EC

Decision 94/904/EC

- **Sewage sludge and soil, 86/278/EEC**
amended by 91/692/EEC
- **Batteries, 91/157/EEC**
amended by 93/86/EEC
- **Packaging waste, 94/62/EC**
Decision 97/129/EC
Decision 97/138/EC

Regulations

- **Supervision of shipment of waste, EEC/259/93**
amended by 120/97/EC
Decision 94/575/EC
Decision 94/721/EC
Decision 94/774/EC
Decision 96/660/EC

D. Water quality

1. Non-White Paper legislation

Directives

Proposed Water Quality Framework Directive, (COM(97)49 –final

- **Urban waste water, 91/271/EEC**
Related decision 93/481/EEC
- **Nitrates, 91/676/EEC**
- **Dangerous substances to the aquatic environment, 76/464/EEC**
including 7 “daughter”-directives, all amended by 91/692/EEC:
Mercury discharges from chlor-alkali industries, 82/176/EEC
Cadmium discharges, 83/513/EEC
Other mercury discharges, 84/156/EEC
HCH discharges, 84/491/EEC
List one substances, 86/280/EEC,
amended by 88/347/EEC and 90/415/EEC

- **Bathing water, 76/160/EEC**
- **Drinking water, 80/778/EEC**
amended by 91/692/EEC
- ***Surface water for the abstraction of drinking water, 75/440/EEC**
amended by 79/869/EEC and 91/692/EEC
Decision 77/795/EEC on common procedures for exchange of information
Amended by decisions 84/422/EEC, 86/574/EEC and 90/2/EEC
- **Measurement and sampling of drinking water, 79/869/EEC**
amended by 81/855/EEC
- ***Ground water 80/68/EEC**
amended by 91/692/EEC
- ***Fish water, 78/659/EEC**
amended by 91/692/EEC
- ***Shellfish water, 79/923/EEC**
amended by 91/692/EEC

** will be incorporated in the proposed Water Quality Framework Directive (COM(97)49)*

Regulations

none

2. White Paper legislation

none

E. Nature protection

1. Non-White Paper legislation

Directives

- **Habitats, 92/43/EEC**
related decision 97/266/EC
- **Wild birds, 79/409/EEC**
amended by 81/854/EEC, 85/411/EEC, 91/244/EEC and 94/24/EC

- **Skins of seal pups, 83/129/EEC**
amended by 85/444/EEC and 89/370/EEC

Regulations

- **Endangered species, 338/97/EC**
amended by regulations 938/97/EC and 2307/97/EC
implemented by regulations 939/97/EC and 2551/97/EC
amended by regulation 767/98/EC
- **Import of whales, 348/81/EEC**
- **[Protection of the Antarctic 90/3943/EEC]**
- **Leghold traps, EEC/3254/91**
implemented by 35/97/EC
- **[Protection of forests against atmospheric pollution, EEC/3528/86**
amended by EEC/1696/87, EEC/2157/92, EEC/926/93, EEC/836/94, EC/1091/94,
EC/690/95, EC/1398/95 and 307/97/EC]
- **[Protection of forests against fire, EEC/2158/92**
amended by EEC/1170/93, EC/804/94 and 308/97/EC]

2. White Paper legislation

none

F. Industrial pollution control and risk management

1. Non-White Paper legislation

Directives

- ***Air pollution from industrial plants, 84/360/EEC**
amended by 91/692/EEC
- **Large combustion plants, 88/609/EEC**
amended by 94/66/EC
- **Integrated Pollution Prevention and Control, IPPC, 96/61/EC**

- **Seveso - Control of major accident hazards, 96/82/EC**
replacing 82/501/EEC, amended by 87/216/EEC, 88/610/EEC and 91/692/EEC

Proposed Directive on industrial emissions of VOC-solvents , COM(96) 538-final.

** will be replaced by the IPPC Directive. 96/61/EC*

Regulations

- **Regulation on Eco-Label, EEC/880/92**
Decisions on eco-label criteria for:
Dishwashers, 93/431/EEC
Soil improvers, 94/923/EEC
Toilet paper, 94/924/EEC
Paper kitchen rolls, 94/925/EEC
Laundry detergents, 95/365/EEC

Single-ended lightbulbs, 95/533/EEC

Indoor paints and varnishes, 96/13/EEC
Bed-linen and T-shirts, 96/304/EEC
Double-ended lightbulbs, 96/337/EEC
Washing machines, 96/461/EEC
Copying paper, 96/467/EEC
Refrigerators, 96/703/EEC
Tissue paper, 98/94/EC
other related decisions:
93/326/EEC,
93/517/EEC
94/10/EC
- **Regulation on EMAS, EEC/1836/93**
related decisions
97/265/EC,
97/267/EC

2 White Paper legislation

none

G. Chemicals and Genetically Modified Organisms

1. Non-White Paper legislation

Directives

- **Animal experiments, 86/609/EEC**
Decision 90/67/EEC
- **[Good laboratory practice, 87/18/EEC**
*related directive 88/320/EEC on inspection
and decision 89/569/EEC]*
- **GMOs, contained use, 90/219/EEC**
amended by 94/51/EC
related decision
91/448/EEC
- **Asbestos, 87/217/EEC**
Amended by directive 91/692/EEC

Regulations

none

2. White Paper legislation

Directives

- **Classification, packaging and labelling of dangerous substances, 67/548/EEC**
*amended by 69/81/EEC, 70/189/EEC, 71/144/EEC, 73/146/EEC, 75/409/EEC,
76/907/EEC, 79/370/EEC, 79/831/EEC, 80/1189/EEC, 81/957/EEC, 82/232/EEC,
83/467/EEC, 84/449/EEC, 86/431/EEC, 87/432/EEC, 88/302/EEC, 88/490/EEC,
90/517/EEC, 91/325/EEC, 91/326/EEC, 91/410/EEC, 91/632/EEC, 92/32/EEC,
92/37/EEC, 92/69/EEC, 93/21/EEC, 93/67/EEC, 93/72/EEC, 93/90/EEC, 93/101/EEC,
93/105/EEC, 94/69/EC, 96/54/EC, 96/56/EC*
related decision 85/71/EEC
- **[Classification, labelling and packaging of dangerous preparations, 88/379/EEC**
*amended by 89/178/EEC, 90/492/EEC, 91/155/EEC, 93/18/EEC, 93/112/EEC,
91/442/EEC, 95/65/EEC]*
- **[Restrictions on the marketing and use of certain dangerous substances and preparations, 76/769/EEC**
*amended by 79/663/EEC, 82/806/EEC, 82/828/EEC, 83/264/EEC, 83/478/EEC,
85/467/EEC, 85/610/EEC, 89/677/EEC, 89/678/EEC, 91/173/EEC, 91/338/EEC,
91/339/EEC, 91/659/EEC, 94/27/EC, 94/48/EC, 94/60/EC, 96/55/EC and 97/10/EC,
97/16/EC]*
- **GMOs, deliberate release, 90/220/EEC**
amended by 94/15/EC, 97/35/EC
related decisions:
91/274/EEC
91/596/EEC

92/146/EEC
93/572/EEC
93/584/EEC
94/385/EC,
94/505/E
94/730/EC
96/158/EC
96/281/EC
96/424/EC
97/98/EC
97/392/EC
97/393/EC
97/549/EC

- **[Detergents, 73/404/EEC**
amended by 82/242/EEC and 86/94/EEC
related directive on testing the biodegradability, 73/405/EEC]
- **[Transport of dangerous goods by road 94/55/EC]**
- **Placing on the market of biocidal products 98/8/CE**

Regulations

- **Existing substances, EEC/793/93**

related regulations:

Principles for the Evaluation of Risks, EC/1488/94
First list of priority substances, EC/1179/94

Second list of priority substances, EC/2268/95,
Delivery of information on existing substances, EC/142/97
Third list of priority substances, EC/143/97

- **Import and export of dangerous chemicals, EEC/2455/92**
- **Ozone depleting substances, EC/3093/94**

H. Noise from vehicles and machinery

1. Non-White Paper legislation

none

2. White Paper legislation

Directives

- **[Motor Vehicles 70/157/EEC**
amended by 73/350/EEC, 77/212/EEC, 81/33/EEC, 84/372/EEC, 84/424/EEC, 87/354/EEC, 89/491/EEC, 92/97/EEC and 96/20/EC]
- **[Motor cycles 78/1015/EEC**
amended by 87/56/EEC and 89/235/EEC]
- **Construction plant equipment (framework), 79/113/EEC**
amended by 81/1051/EEC and 85/405/EEC
- **Subsonic aircraft, 80/51/EEC**
amended by 83/206/EEC Subsonic jet aeroplanes, 89/629/EEC
- **Limitation of the operations of aeroplanes, 92/14/EEC**
- **EEC type approval for construction plant and equipment, 84/532/EEC**
- **Compressors, 84/533/EEC**
amended by 85/406/EEC
- **Tower cranes, 84/534/EEC**
amended by 87/405/EEC
- **Welding generators, 84/535/EEC**
amended by 85/407/EEC
- **Power generators, 84/536/EEC**
amended by 85/408/EEC
- **Concrete breakers, 84/537/EEC**
amended by 85/409/EEC

- **Lawn mowers, 84/538/EEC**
amended by 87/252/EEC, 88/180/EEC and 88/181/EEC
- **Hydraulic excavators, 86/662/EEC**
amended by 89/514/EEC and 95/27/EC
- **Household appliances, 86/594/EEC**

Regulations

none

I. Nuclear safety and Radiation Protection

0. Treaty establishing the European Atomic Energy Community (E.A.E.C-Euratom).

- Title two, provision for the encouragement of progress in the field of nuclear energy, chapter III: Health and safety, articles 33, 35 and 37.

1. Non-White Paper legislation

Directives

- **Radiation protection related to medical exposures, 97/43/EURATOM**
- **Information of the public, 89/618/EURATOM**
- **Radiation protection of outside workers, 90/641/EURATOM**

Regulations

none

2. White Paper legislation

Directives

- **Shipments of radioactive waste, 92/3/EURATOM**

supplemented by decision 93/552/EURATOM

- **Basic Safety Standards, 96/29/EURATOM**
related decision on early exchange of information in case of a radiological emergency, 87/600/EURATOM

Regulations

- **Maximum permitted levels of radioactive contamination of foodstuffs following a radiological emergency, 87/3954/EURATOM**
amended by 2218/89/EURATOM
related regulations:
770/90/EURATOM,
2219/89/EURATOM,
944/89/EURATOM.
- **Imports of agricultural products following the Chernobyl Accident, 90/737/EEC**
amended by 95/686/EC and 97/727/EC
- **Shipments of radioactive substances, 93/1493/EURATOM**

J. Climate change

- **Monitoring mechanism for Community CO₂ and other greenhouse gas emissions**, Council decision 93/389/EEC.

K. Civil protection

- **Community action programme in the field of civil protection**, Council decision 98/22/EC
- **Strengthening Community co-operation on civil protection**, resolution of the Council and the representatives of the Governments of the Member States, meeting within the Council, of 31 October 1994, OJC 313 10. 1. 94
- **[Single European emergency call number**, Council decision 91/396/EEC]

- **Community information system for the control and reduction of pollution caused by hydrocarbons discharged at sea**, Council decision 86/85/EEC

amended by Council decision 88/346/EEC

- **Advisory Committee on the control and reduction of pollution caused by hydrocarbons discharged at sea**, Commission decision 80/686/EEC,

amended by decision 85/208/EEC and decision 87/144/EEC.

- **Strengthening Community co-operation on civil protection**, resolution of the Council and the representatives of the governments of the Member States, meeting within the Council of 31 October 1994, 94/C, OJ 313/01.

- **Community co-operation on civil protection**, resolution of the Council and the representatives of the governments of the Member States, meeting within the Council of 23 November 1993, 90/C, OJ 315/01.

- **Improving mutual aid between Member States in the events of a natural or man-made disaster**, resolution of the Council and the representatives of the governments of the Member States, meeting within the Council of 23 November 1993, 90/C, OJ 315/02.

- **New developments in Community co-operation on civil protection**, Resolution of the Council and the representatives of the governments of the Member States, meeting within the Council of 13 February 1989, 89/C, OJ 44/03.

- **Introduction of Community co-operation on civil protection**, resolution of the Council and the representatives of the governments of the Member States, meeting within the Council of 25 June 1987, 87/C, OJ 176/01.

P. Policy

- **5th Environmental Action Programme**, Resolution by Council and representatives of Member States of 1 February 1993, OJ C 138 17.05.93, p/1

- **Community action programme to promote environmental NGOs**, Council decision 97/872/EC
- **Community strategy on waste management**, Council resolution of 24 February 1997, OJ C 076 11.03.97, p.1
- **Reuse of waste paper and use of recycled paper**, Council recommendation of 3 December 1981, 81/972/EEC
- **Environmental agreements**, Council resolution of 7 Oct. 1997, OJ C 321 22.10.97, p.6
- **Environmental agreements**, Commission recommendation, 96/733/EC
- **Groundwater protection**, Council resolution of 20 February 1995, OJ C049 28.02.95.,p.1
- **Cost allocation and action by public authorities on environmental matters**, Council recommendation 75/436/EURATOM. ECSC,EEC of 3 March 1975
- **Renewal of Community action plan on radioactive waste**, Council resolution of 15 June 1992, OJ C 158 25.06.92, p.3
- **Radioactive waste management**, Council resolution of 19 December 1994 OJ C 379 31.12.94, p.1
- **Protection against indoor exposure to radon**, Commission recommendation, 90/143/EURATOM
- **EC action programme on the control and reduction of pollution caused by hydrocarbons discharged at sea**, Council resolution of 26 June 1978, OJ C 162.08.78, p.1

- **Improving mutual aid between Member States in the event of natural or technological disasters**, resolution of Council and representatives of Member States of 8 July 1991, OJ C 198 27.07.91,p.1
- **Community action programme to combat pollution by cadmium**, Council resolution of 25 January 1988, OJ C 030 04.02.88. p.1
- **Future Community policy concerning the European coastal zone**, Council resolution of 25 February 1992, OJC 059. 06. 03. 92
- **Community strategy for integrated coastal-zone management**, Council resolution of 6 May 1994, OJ C 135 18.05.94, p. 2
- **On the application of Art. 37 of the Euratom Treaty**, Commission recommendation, 91/4/EURATOM
- **Technological problems of nuclear safety**, Council resolution of 22 July 1975, OJ. NO. C185, 14/08/1975, p.0001-0002
- **Technological problems of nuclear safety**, Council resolution of 18 June 1992, OJ. NO. C172, 08/07/1992, p.0002-0003

X. International co-operation

- **Convention on the protection of the Mediterranean Sea against pollution (Barcelona convention) – Protocol for the prevention of pollution of the Mediterranean Sea by dumping from ships and aircraft's**, OJ L 240 19.09. 77, p.3
- **Protocol concerning co-operation in combating pollution of the Mediterranean Sea by oil and other harmful substances in cases of emergency**, OJ L 162 19.06.81, p.6

- **Convention on long-range transboundary air pollution – Resolution on long-range transboundary air pollution.** OJ L 171 27.06.81. p. 13
- **Convention on the conservation of European wildlife and natural habitats,** OJ L 038 10.02.82, p.3,
related decision 98/145/EC
- **Convention on the conservation of migratory species of wild animals,** OJ L 210 19.07.82, p.11
- **Convention on international trade in endangered species of wild fauna and flora,** OJ L 384 31.12.82 p. 7
- **Protocol for the protection of the Mediterranean Sea against pollution from land-based sources,** OJ L 067 12.03.83, p. 3
- **Protocol concerning Mediterranean specially protected areas,** OJL 068 10.03.84 p.36, adopted by Council decision 84/132/EEC
- **Council decision of 12 June 1986 on the conclusion of a Protocol to the 1979 Convention on long-range transboundary air pollution on long-term financing of the co-operative programme for monitoring and evaluation of the long-range transmissions of air pollutants in Europe (EMEP), 86/277/EEC,** OJ L 181 04.07.86, p. 1
- **Protocol to the 1979 Convention on long-range transboundary air pollution on long-term financing of the co-operative programme for monitoring and evaluation of the long-range transmission of air pollutants in Europe (EMEP),** OJ L 181 04.07.86, p.2
- **Council decision of 14 October 1988 concerning the conclusion of the Vienna Convention for the protection of the ozone layer and the Montreal Protocol on substances that deplete the ozone layer,** 88/540/EEC, OJ L 297 31.10.88, p. 8
- **Vienna convention for the protection of the ozone layer,** OJ L 297 31.10.88, p.10

- **Montreal Protocol on substances that deplete the ozone layer – Declaration by the European Economic Community**, OJ L 297 31.10.88, p. 21
- **Convention on the International Commission for the Protection of the Elbe**, OJ L 321 23.11.91, p. 25
- **Amendment to the Montreal protocol on substances that deplete the ozone layer**, OJ L 377 31.12.91, p. 30
- **Basel Convention on the control of transboundary movements of hazardous wastes and their disposal**, OJ L 039 16.02.93, p. 3

related decision 97/640/EC

- **Protocol to the Convention of 8 October 1990 between the Governments of the Federal Republic of Germany and the Czech and Slovak Federal Republic and the European Economic Community on the International Commission for the Protection of the Elbe**, OJ L 045 23.02.93, p.26
- **Protocol to the 1979 Convention on long-range transboundary air pollution concerning the control of emissions of nitrogen oxides or their transboundary fluxes**, OJ L 149 21.06.93, p. 16
- **Convention on biological diversity – Declarations**, OJ L 309 13.12.93, p. 3
- **Amendment to the Montreal Protocol on substances that deplete the ozone layer**, OJ L 033 07.02.94, p. 13
- **United Nations Framework Convention on Climate Change – Declarations**, OJ L 073 16.03.94, p.2
- **Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974, (Helsinki Convention)**, OJ L 073 16.03.94, p. 2
- **Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992, (Helsinki Convention revised in 1992)**, OJ L 073 16.03.94, p. 20

- **European Convention for the Protection of Vertebrate Animals used for Experimental and other Scientific Purposes**, 18.03.1986, Strasbourg, Council of Europe
- **Convention on Transboundary Effects of Industrial Accidents**, 17.03.1992, Helsinki UN-ECE
- **Protocol to the Convention on Long-range Transboundary Air Pollution of 1979 on the further Reductions of Sulphur Emissions**, SO2 13.06.1994, Oslo
- **UN Convention on the Law of the Sea**, 10.12.1982, Montego Bay, Jamaica

ANNEX 3

TABLE OF CONCORDANCE

This annex contains an example of a table of concordance of national with EU legislation which may be used to monitor progress on approximation of an individual directive. This example is more complex than the type of table used in many Member States, because it contains excerpts from the text of the directive as well as the reference and includes a symbolic representation of the level of conformity for each item.

More common is the use of a simple two-column table where only the specific article and sometimes paragraph numbers of the directive are given in the left column, and the corresponding legal reference to the existing proposed legislation is given in the right column, with any comments about conflicting national laws.

The level of compliance with each requirements may be indicated (very generally) according to the following scale:

- direct conflict (e.g. a banned substance which is permitted on the EU market)
- 0** No legislation
- /+ National requirements are inconsistent with EU requirement or partially conform (e.g. a set of drinking water standards which are similar but not identical)
- + Full transposition.

Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management

Article	EU Directive		National Legislation		Compliance*
	Obligation	Deadline	Existing	Proposed	
	Approximate national laws, regulations and procedures	21.5.98			
Art. 1	Objectives				
Art. 2.1-10	Definitions				
Art. 3	Designate competent authorities	21.5.98			
Art. 4.1	The Commission shall set limit values and alert thresholds timetable for Annex I pollutants	no later than 31.12.96 for pollutants 1 to 5 in accordance with art. 8 of directive 92/72/EEC for ozone no later than 31.12.97 for pollutants 9 to 13	not applicable		
Art. 4.2	The Commission shall re-examine elements on which limit values and alert threshold are based		not applicable		
Art. 4.3	List of criteria and techniques to be established for measurement and other techniques for assessing ambient air quality				
Art. 4.4	The Council may set temporary margin of tolerance for limit value		not applicable		
Art. 4.5	The Council shall adopt the legislation provided for in art. 4.1 and provisions laid down in art.4.3 and 4		not applicable		
Art. 4.6	Inform the Commission when more stringent measures than art 4.5 ones are taken				
Art. 4.7	Inform the Commission when limit values or alert thresholds are set for pollutants not referred in				

	Annex I and not covered by Community provisions				
Art. 5	Carry out a preliminary assessment of ambient air quality	at the latest when the first daughter directive enters into force (Art. 4.5)			
Art. 6.1	Assess ambient air quality based on the limit values and alert thresholds	at the latest when the first daughter directive enters into force (Art. 4.5)			
Art. 6.2	List of zones where measurement is mandatory in respect of art. 4.3				
Art. 6.3	Permit to use combination of measurements and modelling techniques in specific case				
Art. 6.4	Permit the sole use of modelling or objective estimation techniques for assessing levels in specific case				
Art. 6.5	Obligations for measurements of pollutants				
Art. 7.1	Take general measures to ensure compliance with the limit values	at the latest when the first daughter directive enters into force (Art. 4.5)			
Art. 7.2	List of criteria measures taken shall follow				
Art. 7.3	Draw up short term action plans	at the latest when the first daughter directive enters into force (Art. 4.5)			
Art. 8.1	Draw up list of zones where levels are higher than the limit value plus the margin of tolerance	at the latest when the first daughter directive enters into force (Art. 4.5)			
Art. 8.2	Draw up a list of zones where the levels are between the limit value and the limit value plus the level of tolerance	at the latest when the first daughter directive enters into force (Art. 4.5)			
Art. 8.3	Prepare a plan or programme zones listed pursuant to Art. 8.1 to attain the limit in accordance with Annex IV	when the first daughter directive enters into force (Art. 4.5)			
Art. 8.4	Prepare an integrated plan for zones where more than 1 pollutant is higher than the limit value plus the margin of tolerance	when the first daughter directive enters into force (Art. 4.5)			
Art. 8.6	Member States shall consult when the limit value plus tolerance is exceeded or the alert threshold following significant pollution originating in another				

	Member State				
Art. 9	Draw up a list of zones where the levels are lower than the limit value	when the first daughter directive enters into force (Art. 4.5)			
Art. 10	Taking measures in case alert threshold levels are exceeded	at the latest when the first daughter directive enters into force (Art. 4.5)			
Art. 11.1-3	Transmit information and reports to the Commission	when the first daughter directive enters into force (Art. 4.5)			
Art. 12.1 and 2	Set up Committee to assist the Commission and draw up procedure		not applicable		
Art. 13	Refer to directive in national legislation transposing this directive Communicate national provisions to the Commission	<i>*as legislation is adopted</i> <i>*as soon as possible</i>	* Note: The deadlines in <i>italic</i> are not set out explicitly in the directive.		
Ann. I	List of atmospheric pollutants to be taken into consideration in the assessment and management of ambient air quality				
Ann. II	Factors to be taken into account when setting limit values and alert thresholds				
Ann. III	Guidelines for selecting air pollutants for consideration				
Ann. IV	Information to be included in the local, regional or national programmes for improvement in the ambient air quality				

ANNEX 4 DEFINITIONS

Transposition

This term means any legislative, regulatory or administrative binding measure taken by any competent authority of a Member State in order to incorporate into the national legal order the obligations, rights and duties enshrined in EU environmental directives. Transposition thus includes not merely the reproduction of the words of a directive in national law, but also any additional provisions, such as the amendment or repeal or conflicting national provisions, which are necessary in order to ensure that national law as a whole properly reflects the provisions of a directive.

Practical Application

Practical application is defined as the incorporation of EU law by the competent authorities into individual decisions, for instance when issuing a permit or devising executing a plan or programme. EU legislation is directly applied by national authorities in case of regulations and directly applicable provisions of directives. However, once a directive is correctly transposed, it is applied through the national transposing measures. It also includes providing the infrastructure and provisions needed in order to enable competent authorities to perform their obligations under EU law and to take the appropriate decisions.

Enforcement

Enforcement is defined broadly as all approaches of the competent authorities to encourage or compel others to comply with existing legislation (e.g. monitoring, on-the-spot controls, sanctions and compulsory corrective measures) in order to improve the performance of environmental policy with the final goal of improving the overall quality of the environment.

Source: *Implementing Community Environmental Law*, Communication from the Commission, COM(96) 500, 22 October 1996